88-4233

WATER QUALITY OF LAKE AUSTIN AND TOWN LAKE, AUSTIN, TEXAS

U.S. GEOLOGICAL SURVEY
WATER-RESOURCES INVESTIGATIONS REPORT 88-4233

Prepared in cooperation with the
CITY OF AUSTIN

I 19.42/4:

READEX FICHE best copy available

WATER QUALITY OF LAKE AUSTIN AND TOWN LAKE, AUSTIN, TEXAS

By Freeman L. Andrews, Frank C. Wells, Wanda J. Shelby, and Emma M. McPherson

---

U.S. GEOLOGICAL SURVEY

WATER-RESOURCES INVESTIGATIONS REPORT 88-4233

U.S. DEPARTMENT OF THE INTERIOR

MARCH 3, 1849

Prepared in cooperation with the

CITY OF AUSTIN

Austin, Texas
1988

DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

District Chief
U.S. Geological Survey
Water Resources Division
8011 Cameron Rd., Bldg. 1
Austin, Texas 78753

Copies of this report can
be purchased from:

U.S. Geological Survey
Books and Open-File Reports
Federal Center, Bldg. 810
Box 25425
Denver, CO 80225

CONTENTS

Page

- Abstract 1
- Introduction 3
  - Purpose and scope 3
  - Location, physiography, and drainage 3
  - Climate 7
  - Population 8
  - Hydrology 8
- Methods of analysis 13
  - Classification of water-quality surveys 13
  - Statistical methods 13
- Water quality 18
  - Thermal stratification 18
  - Dissolved oxygen 21
  - Dissolved trace elements 28
  - Total nutrients 30
    - Nitrogen 37
    - Phosphorus 42
  - Dissolved solids, chloride, sulfate, and hardness 47
  - Monthly loads of dissolved solids 54
  - Indicator bacteria 58
  - Effects of stormwater runoff on water quality in Lake Austin and Town Lake 63
  - Suitability of water as a public supply 68
- Effectiveness of sampling program and potential changes 76
- Conclusions 76
- References 79
- Supplemental information 80

ILLUSTRATIONS

- Figure 1. Map showing location of highland lakes 4
- 2. Map showing location of water-quality data-collection sites on Lake Austin and Town Lake 5
- 3-38. Graphs showing:
  - 3. Mean monthly precipitation at Austin, Texas, Municipal Airport, 1900-76 9
  - 4. Total monthly precipition recorded at Austin, Texas, Municipal Airport, 1975-84 10
  - 5. Population growth in Austin and Travis County, Texas, 1950-80 11
  - 6. Average monthly discharge for selected streamflow-gaging stations in the Lake Austin and Town Lake drainage basins 12
  - 7. Average retention time of water in Lake Austin and Town Lake, 1975-84 14
  - 8. Variations in monthly mean air temperature at Austin and water temperature at selected sites for Lake Austin and Town Lake, 1975-84 20
  - 9. Patterns of water temperature in Lake Austin, August 29, 1983 22

ILLUSTRATIONS--Continued

Page

Figure 10. Variations of average dissolved-oxygen concentrations during summer and winter surveys of Lake Austin---------- 24

11. Variations of average dissolved-oxygen concentrations during summer and winter surveys of Town Lake------------ 25

12. Seasonal profiles of water temperature and dissolved oxygen in Lake Austin site Ac---------------------------- 26

13. Seasonal profiles of water temperature and dissolved oxygen in Town Lake site Ac------------------------------ 27

14. Variations of average concentrations of dissolved iron during summer and winter surveys of Lake Austin---------- 31

15. Variations of average concentrations of dissolved manganese during summer and winter surveys of Lake Austin----- 32

16. Variations of average concentrations of dissolved iron during summer and winter surveys of Town Lake------------ 33

17. Variations of average concentrations of dissolved manganese during summer and winter surveys of Town Lake------ 34

18. Variations of concentrations of dissolved iron and dissolved manganese in Lake Austin site Ac--------------- 35

19. Variations of concentrations of dissolved iron and dissolved manganese in Town Lake site Ac----------------- 36

20. Variations of average concentrations of total nitrogen and organic nitrogen during summer and winter surveys of Lake Austin-- 38

21. Variations of average concentrations of total nitrogen and organic nitrogen during summer and winter surveys of Town Lake-- 39

22. Variations of average concentrations of ammonia nitrogen and nitrite plus nitrate nitrogen during summer and winter surveys of Lake Austin---------------------------- 40

23. Variations of average concentrations of ammonia nitrogen and nitrite plus nitrate nitrogen during summer and winter surveys of Town Lake------------------------------ 41

24. Variations of volume-weighted-average concentrations of total nitrogen, organic nitrogen, ammonia nitrogen, and nitrite plus nitrate nitrogen in Lake Austin, October 1978-October 1984--------------------------------------- 43

25. Variations of volume-weighted-average concentrations of total nitrogen, organic nitrogen, ammonia nitrogen, and nitrite plus nitrate nitrogen in Town Lake, February 1975-October 1984------------------------------ 44

26. Variations of average concentrations of total phosphorus during summer and winter surveys of Lake Austin---------- 45

27. Variations of average concentrations of total phosphorus during summer and winter surveys of Town Lake------------ 46

28. Variations in volume-weighted-average concentrations of phosphorus in Lake Austin, October 1978-October 1984----- 48

29. Variations in volume-weighted-average concentrations of phosphorus in Town Lake, February 1975-October 1984------ 49

30. Comparison of dissolved-solids concentrations at site Ac in Lake Austin and Town Lake-------------------- 51

31. Volume-weighted-average concentrations of dissolved solids, hardness, chloride, and sulfate in Lake Austin--- 55

ILLUSTRATIONS--Continued

Page
Figure 32. Volume-weighted-average concentrations of dissolved solids, hardness, chloride, and sulfate in Town Lake----- 56
33. Dissolved-solids loads in Lake Austin and Town Lake-------- 57
34. Average bacterial densities in Lake Austin----------------- 59
35. Average bacterial densities in Town Lake------------------- 60
36. Bacterial densities during periods of release and/or runoff to Lake Austin site Ac-------------------- 64
37. Bacterial densities during periods of release and/or runoff to Town Lake site Ac---------------------- 65
38. Fecal-coliform/fecal-streptococci ratios for Lake Austin and Town Lake------------------------------ 66

TABLES

Table 1. Capacity data and water use for the highland lakes------------ 6
2. Classification of surveys for Lake Austin--------------------- 15
3. Classification of surveys for Town Lake----------------------- 16
4. Maximum and minimum dissolved-solids concentrations for sites in Lake Austin-------------------------------------- 52
5. Maximum and minimum dissolved-solids concentrations for sites in Town Lake-- 53
6. Statistical summary of bacteria data for selected stations on Lake Austin and Town Lake, 1978-85 water years-- 61
7. Summary of bacteria data for Lake Austin---------------------- 62
8. Summary of bacteria data for Town Lake------------------------ 67
9. Source and significance of selected constituents and properties commonly reported in water analyses-------------- 69
10. Summary of maximum contaminant levels for selected water-quality constituents and properties for public water systems------------------------- 75
11-27. Chemical-quality surveys of Lake Austin:
11. October 17, 1978-- 81
12. February 7, 1979-- 87
13. May 30, 1979-- 92
14. August 21, 1979--- 96
15. March 5, 1980--- 101
16. May 20, 1980-- 107
17. July 30, 1980--- 111
18. March 2, 1981--- 117
19. July 28, 1981--- 123
20. February 16, 1982--------------------------------------- 129
21. August 19, 1982--- 134
22. January 5, 1983--- 139
23. August 29, 1983--- 144
24. March 6, 1984--- 149
25. August 17, 1984--- 154
26. October 10, 1984-- 159
27. October 24, 1984-- 163
28-59. Chemical-quality surveys of Town Lake:
28. February 3, 1975-- 167
29. June 12, 1975--- 172

TABLES--Continued

Page

Tables 28-59--Cont.

30. August 12, 1975-- 176
31. January 6, 1976-- 181
32. April 20, 1976-- 186
33. September 1, 1976-- 190
34. September 2, 1976-- 195
35. December 28, 1976-- 198
36. April 26, 1977-- 203
37. August 23, 1977-- 207
38. December 29, 1977-- 212
39. April 10, 1978-- 218
40. July 18, 1978-- 224
41. October 16, 1978-- 229
42. February 7, 1979-- 235
43. May 29, 1979-- 240
44. July 27, 1979-- 244
45. August 22, 1979-- 249
46. March 3, 1980-- 253
47. March 28, 1980-- 259
48. May 19, 1980-- 264
49. July 31, 1980-- 269
50. March 4, 1981-- 275
51. April 27, 1981-- 281
52. May 26, 1981-- 285
53. February 17, 1982-- 290
54. August 20, 1982-- 295
55. January 6, 1983-- 299
56. August 30, 1983-- 304
57. March 7, 1984-- 309
58. August 20, 1984-- 314
59. October 11, 1984-- 318

METRIC CONVERSIONS

Factors for converting inch-pound units to metric (International System) units are given in the following table:

Multiply inch-pound unit	By	To obtain metric units
acre	0.4047	hectare
acre-foot (acre-ft)	0.001233	cubic hectometer
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
foot (ft)	0.3048	meter
inch (in)	25.4	millimeter
mile (mi)	1.609	kilometer
square mile (mi^2)	2.590	square kilometer

Temperature data in this report are in degrees Celsius (°C) and may be converted to degrees Fahrenheit (°F) by the following formula:

$$°F = 1.8\,(°C) + 32.$$

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Sea Level Datum of 1929."

WATER QUALITY OF LAKE AUSTIN AND TOWN LAKE, AUSTIN, TEXAS

By

Freeman L. Andrews, Frank C. Wells,
Wanda J. Shelby, and Emma M. McPherson

ABSTRACT

Lake Austin and Town Lake are located on the Colorado River in Travis County, central Texas, and serve as a source of water for municipal and industrial water supplies, electrical-power generation, and recreation for more than 500,000 people in the Austin metropolitan area. Lake Austin, located immediately downstream of Lake Travis, extends for more than 20 miles into the western edge of the city of Austin. Town Lake extends through the downtown area of the city of Austin for nearly 6 miles where the Colorado River is impounded by Longhorn Dam.

Many of the detrimental effects of impoundment of water in a lake or reservoir are related to thermal stratification, which generally does not occur in Lake Austin or in Town Lake. The largest detected difference in vertical temperature was 6.5 degrees Celsius in Lake Austin and 3.5 degrees Celsius in Town Lake. The small vertical temperature variations in both lakes can be attributed to shallow depths in the lakes and to the short retention times of water in the lakes during the summer months.

Large vertical dissolved-oxygen gradients were not detected in Lake Austin and Town Lake. Average dissolved-oxygen concentrations for Lake Austin at site Ac, a deep site (about 50 feet) at the dam, differ by about 2.5 milligrams per liter from surface to bottom during the summer. At site Ac on Town Lake, average dissolved-oxygen concentrations differ by about 1 milligram per liter from surface to bottom. The largest areal variations in dissolved oxygen generally occur in Lake Austin during the summer. Water released to Lake Austin during the summer is from below the thermocline in Lake Travis, and consequently, dissolved-oxygen concentrations generally are small. For example, in August 1984, dissolved-oxygen concentrations in Lake Austin increased from 2.8 milligrams per liter in the headwaters to slightly greater than 7.0 milligrams per liter approximately 14 miles downstream. This increase in dissolved oxygen was caused by reaeration from the atmosphere and from photosynthetic production of oxygen by aquatic plants.

Dissolved trace-element data collected from Lake Austin and Town Lake indicate that with the exception of iron, manganese, and mercury, none of the dissolved trace elements analyzed for exceeded either the primary maximum contaminant level or secondary maximum contaminant level set by the U.S. Environmental Protection Agency. Average concentrations of dissolved iron and dissolved manganese in water collected near the bottom of Lake Austin did not exceed 40 and 50 micrograms per liter, respectively.

Little seasonal or areal variation was noted in nitrogen concentrations in Lake Austin or Town Lake. Organic nitrogen is the predominant nitrogen

species in both lakes. Stormwater runoff had little effect on nitrogen concentrations in Lake Austin. Nitrogen concentrations in Town Lake were slightly larger following periods of runoff. Total nitrogen concentrations in Town Lake following periods of runoff often exceed 1.0 milligram per liter.

Total phosphorus concentrations are small in Lake Austin and Town Lake. About 95 percent of the total phosphorus concentrations measured in Lake Austin and about 81 percent of the total phosphorus concentrations measured in Town Lake were less than 0.03 milligram per liter. Total phosphorus concentrations are largest in Town Lake following periods of runoff.

Dissolved-solids concentrations ranged from 240 to 340 milligrams per liter in Lake Austin and from 170 to 360 milligrams per liter in Town Lake. The smallest concentrations of dissolved solids in Town Lake occurred following periods of runoff. During periods of no runoff, dissolved-solids concentrations in Town Lake ranged from 240 to 360 milligrams per liter, which was very similar to the range in Lake Austin.

Densities of fecal-coliform bacteria in Lake Austin ranged from less than 1 to 600 colonies per 100 milliliters, and densities of fecal-streptococci bacteria ranged from less than 1 to 340 colonies per 100 milliliters. Densities of fecal-coliform bacteria in Town Lake ranged from 4 to 14,000 colonies per 100 milliliters, and densities of fecal-streptococci bacteria ranged from less than 1 to 15,000 colonies per 100 milliliters. The largest densities of both bacteria in Town Lake occurred following runoff.

Little or no effect of stormwater runoff on temperature, dissolved oxygen, or trace elements was detected in either Lake Austin or Town Lake. Increased concentrations of total nitrogen and phosphorus were detected in Town Lake, but not in Lake Austin following runoff. A decrease in concentrations of dissolved solids and major ions occurred in Town Lake, but not in Lake Austin, following runoff. Densities of fecal-coliform and fecal-streptococci bacteria were larger in Lake Austin and Town Lake following runoff, but significantly larger increases were noted in Town Lake.

Water-quality data collected from Lake Austin and Town Lake, following runoff, generally were not adequate to fully determine the effects of runoff on the lakes. Data collection should not to be limited to fixed-station sampling following runoff, and both lakes need to be sampled simultaneously as soon as possible following significant precipitation.

INTRODUCTION

Since October 1961, the U.S. Geological Survey periodically has conducted comprehensive water-quality surveys of selected lakes and reservoirs in Texas as part of a continuing cooperative program with State, Federal, and local agencies to inventory the surface-water resources of the State. During the 1975 and 1978 water years, the program was expanded, in cooperation with the city of Austin, to include Lake Austin and Town Lake, respectively. Lake Austin and Town Lake are impoundments on the Colorado River in Austin, Texas, and both lakes serve as municipal and industrial water supplies as well as recreational facilities for more than one-half million people located in the Austin metropolitan area.

Purpose and Scope

One to four comprehensive water-quality surveys per year were conducted on each of the lakes. Data collected during each lake survey included in-situ measurements of specific conductance and dissolved oxygen; and water samples were collected and analyzed for major dissolved chemical constituents, total nutrients, dissolved iron and manganese, selected dissolved trace elements, and selected indicator bacteria. The purpose of this report is to describe and explain the seasonal, areal, and temporal variations in the water quality of Lake Austin (1978-84) and Town Lake (1975-84); similarities and differences in these variations between the two lakes; and to evaluate the impact of surface-water runoff on the water quality of the lakes.

Water-quality data have been collected on many small tributaries in the Colorado River basin in the Austin area as part of an Austin urban-hydrology program. Much of the data were storm-event related and were analyzed for presentation in a separate report; therefore, they were not included in this study.

Location, Physiography, and Drainage

Lake Austin and Town Lake, located on the Colorado River in Travis County, Texas, are the two most downstream of seven reservoirs. The reservoirs impounded along a 150 mi reach of the Colorado River since 1932 form the highland lakes of Central Texas (fig. 1). The storage capacity and surface area of each of the lakes are given in table 1. The six most upstream lakes are owned and operated by the Lower Colorado River Authority (LCRA) for the purpose of flood control, municipal and industrial water supply, electrical-power generation, and recreation. Town Lake is owned and operated by the city of Austin and is used for water supply, electrical-power generation, and recreation.

Lake Austin is located immediately downstream of Lake Travis and extends for more than 20 mi into the western edge of the city of Austin, where the Colorado River is impounded by Tom Miller Dam (fig. 2). Most of the 91 mi^2 watershed of Lake Austin is located west of the Balcones fault zone, which separates the Gulf Coastal Plain from the Edwards Plateau. The upthrown side of the fault zone is located to the west of the fault, making the topography in the Lake Austin watershed relatively rugged. Altitudes in the Lake Austin

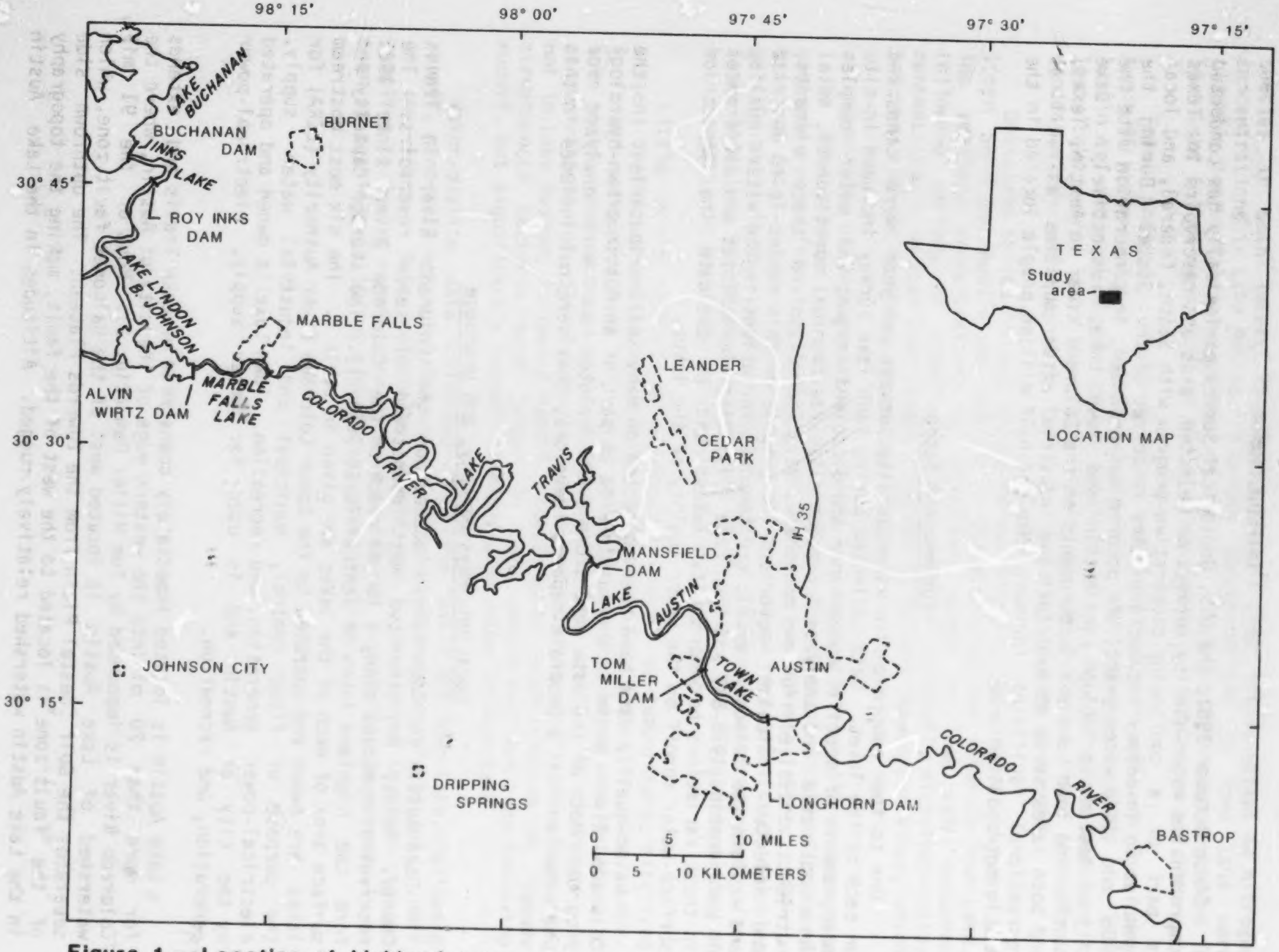
98° 15'
98° 00'
97° 45'
97° 30'
97° 15'
30° 45'
30° 30'
30° 15'
LAKE BUCHANAN
BUCHANAN DAM
BURNET
INKS LAKE
ROY INKS DAM
LAKE LYNDON B. JOHNSON
MARBLE FALLS
ALVIN WIRTZ DAM
MARBLE FALLS LAKE
COLORADO RIVER
LAKE TRAVIS
LEANDER
CEDAR PARK
IH 35
MANSFIELD DAM
LAKE AUSTIN
TOM MILLER DAM
TOWN LAKE
AUSTIN
JOHNSON CITY
DRIPPING SPRINGS
LONGHORN DAM
COLORADO RIVER
BASTROP
0 5 10 MILES
0 5 10 KILOMETERS
TEXAS
Study area
LOCATION MAP

Figure 1.--Location of highland lakes.

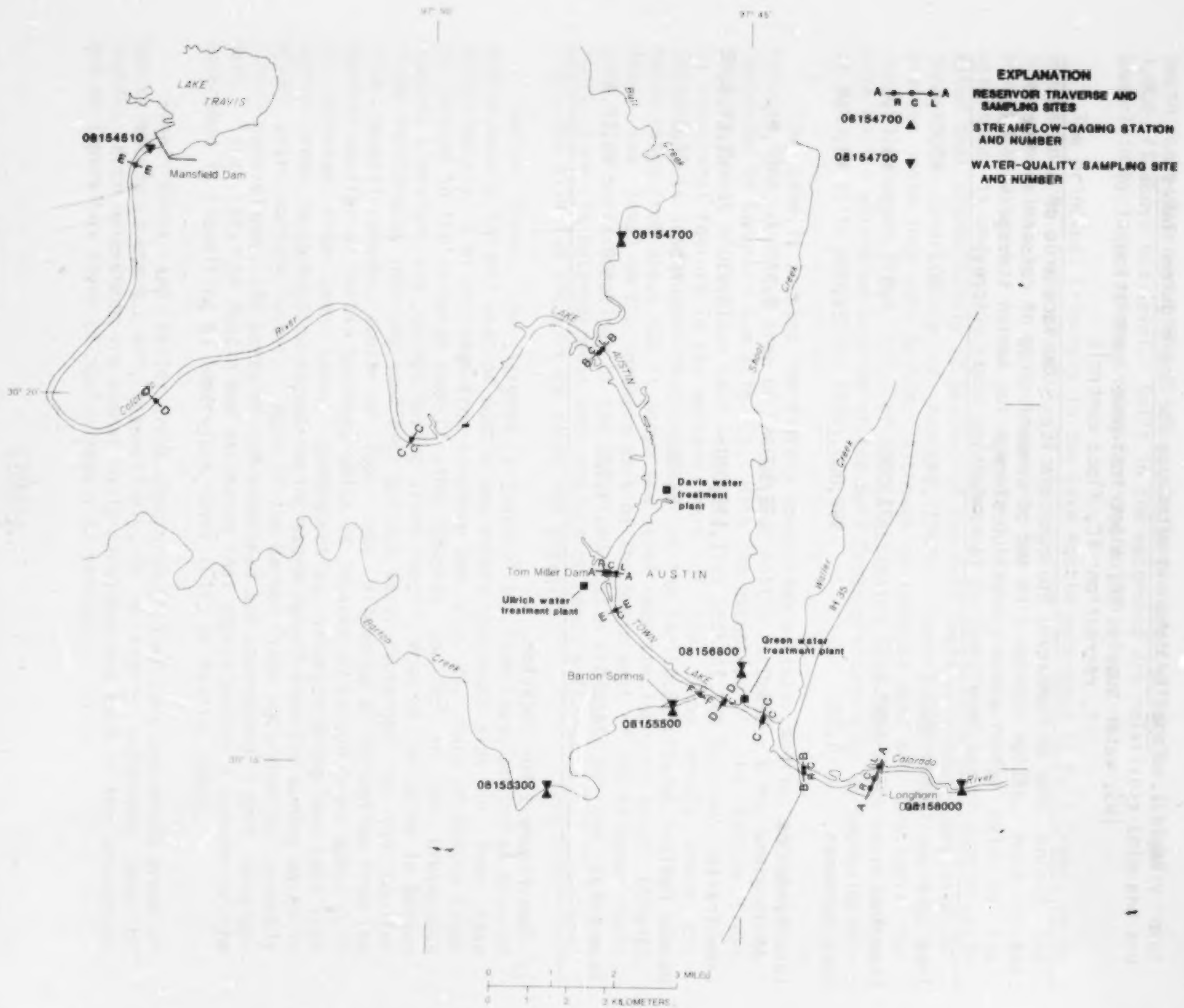
EXPLANATION
A R C L A
RESERVOIR TRAVERSE AND SAMPLING SITES
08154700 ▲
STREAMFLOW-GAGING STATION AND NUMBER
08154700 ▼
WATER-QUALITY SAMPLING SITE AND NUMBER
97° 50'
97° 45'
30° 20'
30° 15'
LAKE TRAVIS
08154510
E E
Mansfield Dam
Colorado
River
D D
C C
LAKE
AUSTIN
B C L B
Bull Creek
08154700
Shoal Creek
Waller Creek
IH 35
Davis water treatment plant
Tom Miller Dam
A R C L A
AUSTIN
Ullrich water treatment plant
E C E
TOWN
LAKE
08156800
Green water treatment plant
Barton Springs
F C F
D C D
C C
08155500
Barton Creek
08155300
B R C B
A R C L A
Colorado River
Longhorn
08158000
0 1 2 3 MILES
0 1 2 3 KILOMETERS

Figure 2.--Water-quality data-collection sites on Lake Austin and Town Lake.

Table 1.--Capacity data and water use for the highland lakes

[WS, water supply; EP, electrical-power generation;
R, recreation; FC, flood control]

Lake 1/	Top of conservation storage (feet above sea level)	Storage capacity at top of conservation storage (acre-feet)	Surface area of top of conservation storage (acres)	Use of lake
Inks Lake	888.5	17,540	803	WS,EP,R
Lake Austin	492.8	21,000	1,830	WS,EP,R
Lake Buchanan	1,020	992,000	23,060	WS,EP,R
Lake Lyndon B. Johnson	825.0	138,500	6,375	EP,R
Lake Travis	681.1	1,172,000	18,930	WS,EP,R,FC
Marble Falls Lake	738.0	8,760	780	EP,R
Town Lake	428.0	3,520	500	WS,EP,R

1/ See figure 1 for location.

basin range from about 500 ft above sea level near the lake to slightly over 1,000 ft above sea level. Soils in the watershed are relatively thin and are underlain by layers of hard limestone and dolomite.

The principal tributary in the Lake Austin watershed is Bull Creek, which drains an area of approximately 31 mi² north of Lake Austin and enters the lake approximately 4 mi upstream from Tom Miller Dam (fig. 2). Much of the Bull Creek watershed is not yet urbanized, although the eastern half of the watershed is undergoing rapid development. In 1984, the city of Austin estimated that approximately 12 percent of the Bull Creek watershed consisted of impervious cover (City of Austin, 1984). Several additional small tributaries drain into Lake Austin. Although no land-use data are available for these drainages, the city of Austin estimates that impervious cover in the Lake Austin watershed outside of the Bull Creek drainage also is approximately 12 percent (City of Austin, 1984).

Town Lake is located immediately downstream of Lake Austin and extends through the downtown area of the city of Austin for nearly 6 mi, where it is impounded by Longhorn Dam (fig. 2). With the exception of the Barton Creek drainage, most of the Town Lake watershed lies east of the Balcones fault zone (a structural feature in the western part of the study area), where the topography is less rugged than that west of the fault. Altitudes in Town Lake basin range from about 430 ft above sea level near the lake, to about 800 ft above sea level in the northern part of the basin east of the Balcones fault zone. The surface geology of the urbanized Austin area east of the Balcones fault zone is heterogeneous and consists of hard, soft, and mixed limestone, clay, and alluvium and terrace sands and gravels.

Barton Creek, the largest tributary to Town Lake, drains an area of approximately 120 mi² west of Austin and enters the south side of Town Lake approximately 3 mi upstream from Longhorn Dam (fig. 2). Part of Barton Creek is located in the recharge zone of the Edwards aquifer in the Cretaceous Edwards Limestone and, except during storm runoff, most of the water in Barton Creek infiltrates into the aquifer. Surface water recharged to the aquifer from several creeks south of Town Lake discharge as springflow from the Edwards aquifer at Barton Springs, which is located in Barton Creek about 0.75 mi upstream from Town Lake. Consequently, water entering Town Lake from Barton Creek is springflow except during storm runoff when the spring water is mixed with surface water. Much of the Barton Creek watershed is currently (1987) undeveloped, but parts of the watershed are undergoing rapid development. The city of Austin has estimated that approximately 8 percent of the watershed is classified as impervious cover (City of Austin, 1984).

Shoal Creek and Waller Creek discharge to Town Lake and drain areas of approximately 13 and 4.1 mi², respectively, in a highly urbanized area of Austin. Both watersheds are almost fully developed and each of the watersheds has an impervious cover of approximately 47 percent.

Climate

The climate of Austin is humid subtropical with hot summers. Winters are mild with below-freezing temperatures occurring on an average of less than 25 days each year. Rather strong northerly winds, accompanied by sharp drops in temperature, occur occasionally during the winter months in connection with cold fronts, but cold periods are usually of short duration. Daytime temperatures in summer are generally about 95 °F, but summer nights are usually pleasant with average daily minimums in the low seventies.

According to long-term precipitation records (1900-76) collected by the National Weather Service at the Austin Municipal Airport, the annual mean precipitation at this station is about 33.5 in. These records indicate that precipitation is fairly evenly distributed throughout the year, with the most intense precipitation generally occurring in the late spring (fig. 3). A secondary precipitation peak generally occurs in September. Precipitation from April through September usually results from thundershowers, with a fairly large quantity falling within short periods of time. Although thunderstorms and heavy rains occur in all months of the year, most of the winter precipitation occurs as light rain. Several periods of intense precipitation occurred during the study period (fig. 4). During May and June of 1981, nearly 24 in of precipitation were recorded at the airport.

Population

Population growth in Austin and in Travis County has been large in recent years (fig. 5). The population of the city of Austin, according to the 1980 census, was 345,496--an increase of about 37.2 percent since 1970. The population of Travis County in 1980 was 419,573--an increase of 47 percent since 1970. The 1980 census data indicate that Austin and Travis County are the sixth most populated city and county in Texas. A reliable source of water for agricultural use, industrial use, and municipal supply is needed to support this growth and the anticipated future development.

Hydrology

Both Lake Austin and Town Lake are relatively constant-level reservoirs built for municipal and industrial water supply, electrical-power generation, and recreation. Discharges through Lake Austin and Town Lake are controlled largely by releases from Lake Travis through Mansfield Dam. The LCRA controls releases at this location and at Tom Miller Dam, which impounds water in Lake Austin. Longhorn Dam, which impounds water in Town Lake and is controlled by the city of Austin, has automatic gates which open at 0.5 ft above normal pool elevation.

Releases from Mansfield Dam (Lake Austin) and discharges at the Colorado River at Austin gage (located about 1.5 mi downstream from Longhorn Dam) closely parallel one another (fig. 6). The largest releases generally occur in May and June. From March 15 to October 15, releases are made periodically on the basis of downstream water requirements, which are primarily demands for irrigation.

Major tributary inflows into Lake Austin and Town Lake also are shown in figure 6. Springflow from Barton Springs into Barton Creek provides the largest constant inflow into Town Lake. During and following runoff, significant contributions of inflow also occur from the major tributaries. Much of the inflow from runoff occurs during April, May, June, September, and October.

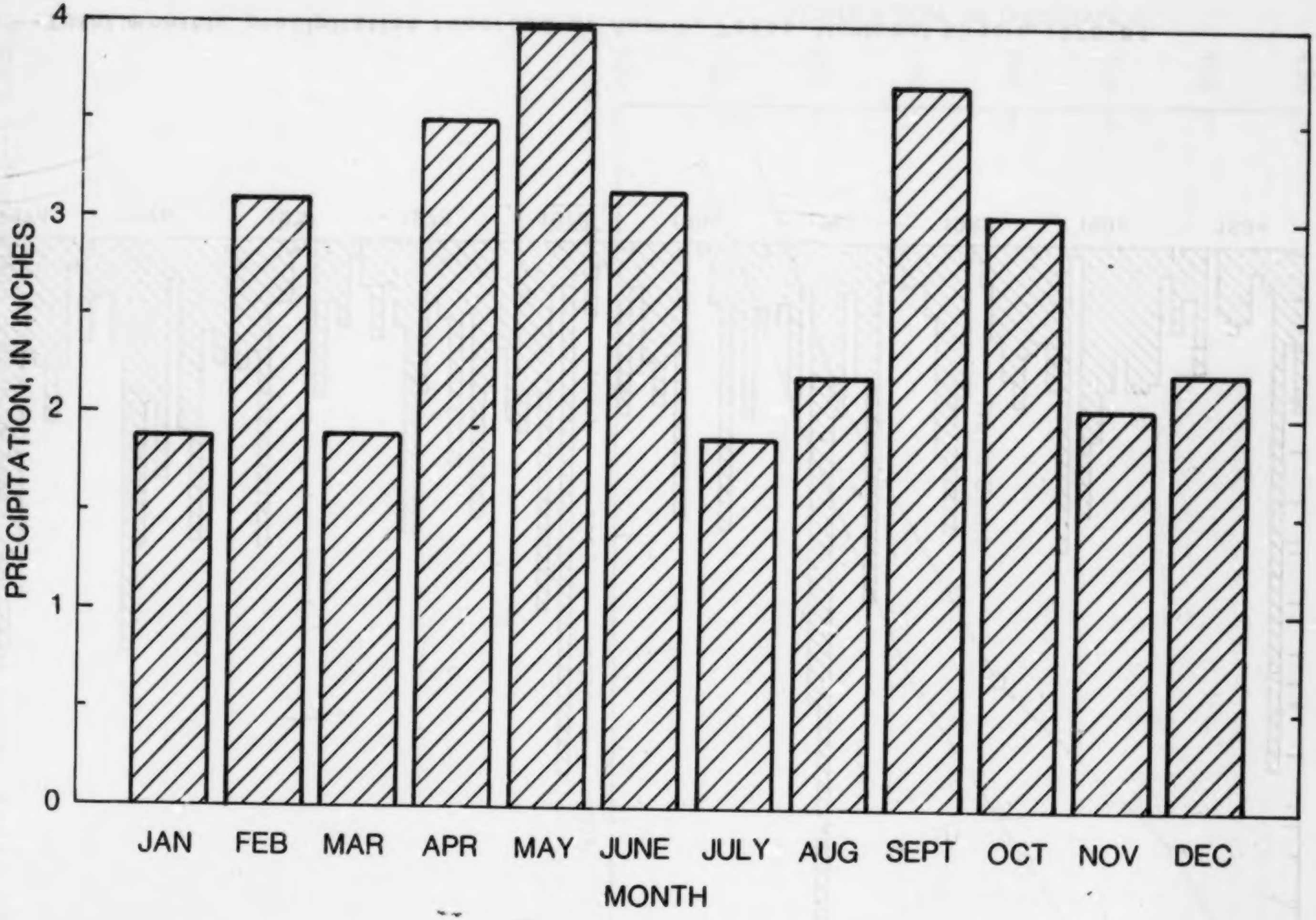

Figure 3.--Mean monthly precipitation at Austin, Texas, Municipal Airport, 1900-76.

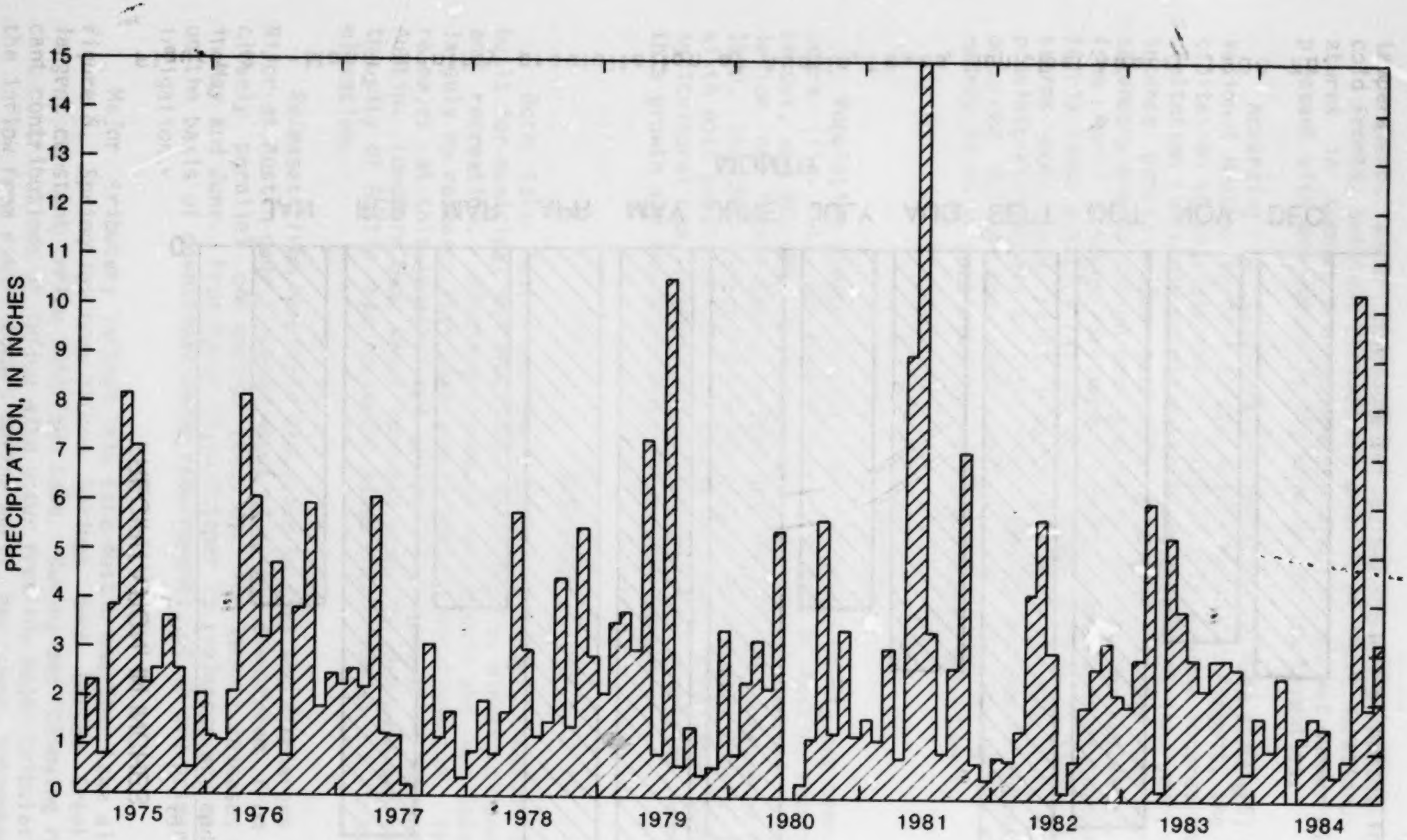

Figure 4.--Total monthly precipitation recorded at Austin, Texas, Municipal Airport, 1975-84.

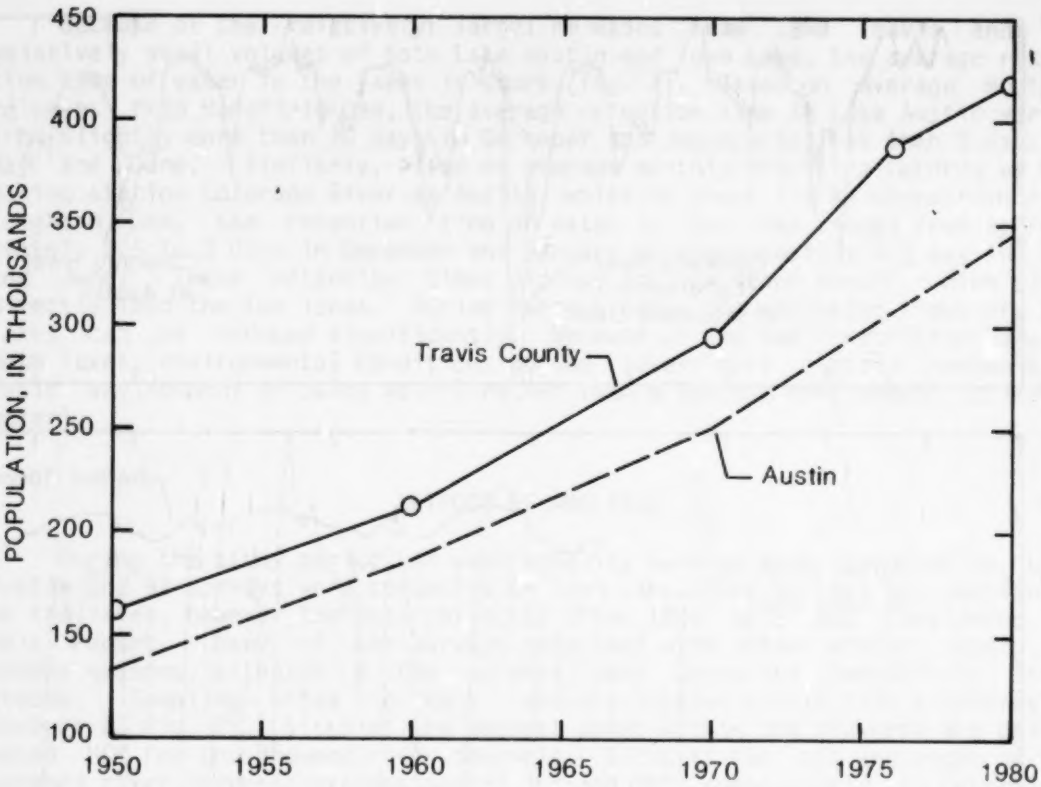

Figure 5.--Population growth in Austin and Travis County, Texas, 1950-80.

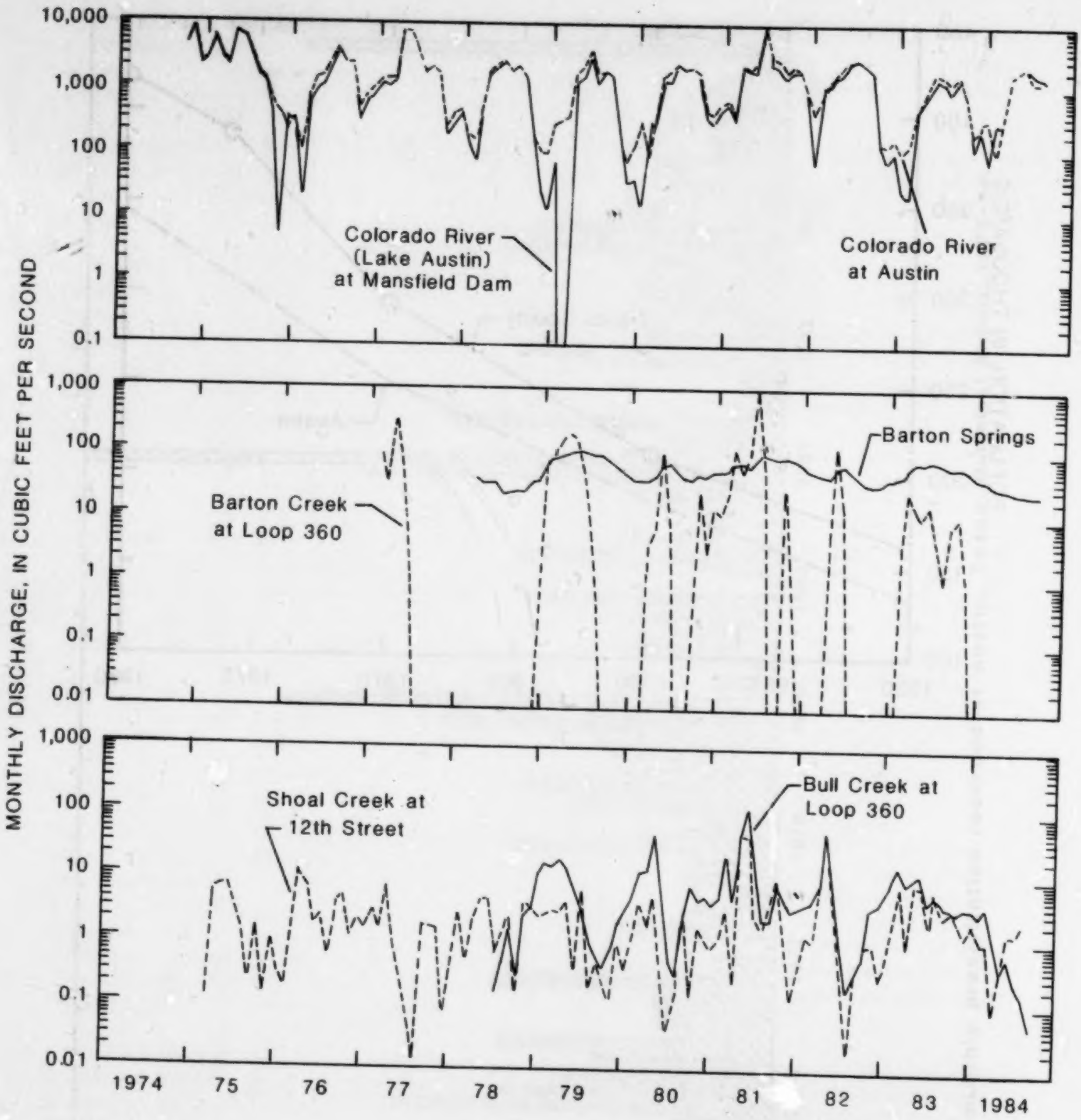

Figure 6.-- Average monthly discharge for selected streamflow-gaging stations in the Lake Austin and Town Lake drainage basins.

Because of the relatively large releases from Lake Travis and the relatively small volumes of both Lake Austin and Town Lake, the average retention time of water in the lakes is short (fig. 7). Based on average monthly releases from Mansfield Dam, the average retention time in Lake Austin varies from slightly more than 20 days in December and January to less than 5 days in May and June. Similarly, based on average monthly discharge records at the gaging station Colorado River at Austin, which is about 1.5 mi downstream from Longhorn Dam, the retention time of water in Town Lake ranges from approximately 2.5 to 3 days in December and January to approximately 0.5 day in May and June. These retention times did not include storm runoff, which flows directly into the two lakes. During large storms, the retention times of the lakes can be reduced significantly. Because of the small retention time in both lakes, environmental conditions in the lakes more closely resemble a lotic environment (flowing water) rather than a lenthic environment (standing water).

METHODS OF ANALYSIS

During the study period, 17 water-quality surveys were conducted on Lake Austin and 32 surveys were conducted on Town Lake. The surveys are continuing on the lakes, however the data collected after 1984 were not considered in this report. Many of the surveys coincided with either winter, spring, or summer seasons, although a few surveys were conducted immediately after storms. Sampling sites in each lake are located within five traverses (A through E, fig. 2). Sites at the deepest point within the traverse are designated "C" for the drowned river channels. Sites to the left and right of the drowned river channels are designated "L" and "R", respectively, as determined when oriented downstream. These data are summarized in tables 11-59 of this report (Supplemental Information).

Classification of Water-Quality Surveys

For purposes of this report, outflow data from Lake Travis and Lake Austin were obtained from the LCRA for each survey date and for 2 days prior to each survey. These data, along with available precipitation data and estimates of storm runoff, were used to classify each survey as: (1) No release/little runoff; (2) large release/little runoff; or (3) runoff conditions (tables 2 and 3). Some surveys clearly did not fall into any of these classifications and were not classified.

Statistical Methods

Statistical procedures in this study were performed using the Statistical Analysis System (SAS)[1] developed by the SAS Institute of Cary, North Carolina, (SAS Institute, Inc., 1982). The SAS computer system has been interfaced with the Geological Survey's National Water Data Storage and Retrieval System

---

[1] The use of trade names in this report is for identification only and does not constitute endorsement by the U.S. Geological Survey.

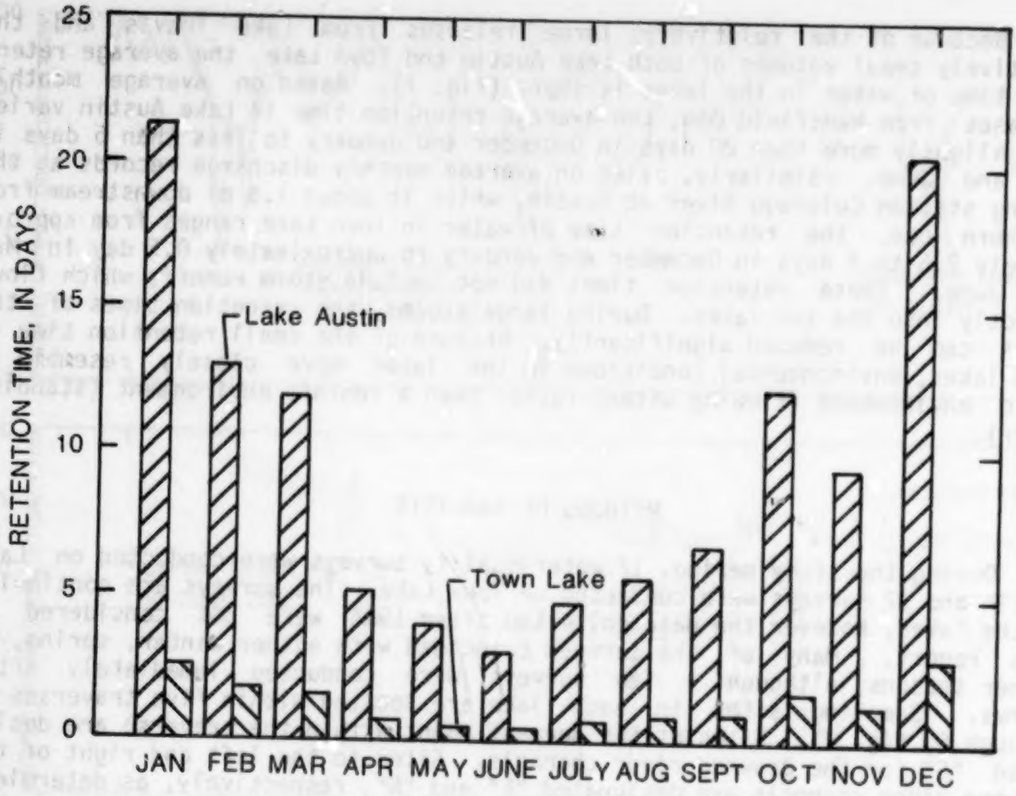

Figure 7.-- Average retention time of water in Lake Austin and Town Lake, 1975-84.

Table 2.--Classification of surveys for Lake Austin

[NN, no release/little runoff; LN, large release/little runoff; RO, runoff; ft^3/s, cubic feet per second]

Sample date	Classification	Sample date and previous 2 days	Releases to lake (ft3/s)	Local runoff to lake (ft^3/s)	Total inflow to lake (ft^3/s)	Releases as percentage of total inflow	Runoff as percentage of total inflow
10/17/78	NN	15	0	0.90	0.90	0	100
		16	218	.90	219	99.6	.4
		17	0	.86	.86	0	100
02/07/79	RO	5	0	119	119	0	100
		6	0	241	241	0	100
		7	0	159	159	0	100
05/30/79	LN	28	1,532	27	1,559	98	2
		29	1,770	26	1,796	98.6	1.4
		30	1,513	35	1,548	98	2
08/21/79	LN	19	1,966	3.3	1,969	99.8	.2
		20	2,047	3.3	2,050	99.8	.2
		21	2,017	3.1	2,020	99.8	.2
03/05/80	NN	3	372	18	390	95	5
		4	0	20	20	0	100
		5	0	18	18	0	100
05/20/80	NN	18	0	209	209	0	100
		19	197	196	393	50	50
		20	137	164	301	45	55
07/30/80	LN	28	1,588	.86	1,588	99.95	.05
		29	1,768	.65	1,769	99.97	.03
		30	1,553	.65	1,554	99.96	.04
03/02/81	NN	28	0	17	17	0	100
		1	0	26	26	0	100
		2	0	22	22	0	100
07/28/81	LN	26	1,822	15	1,837	99	1
		27	1,804	19	1,823	99	1
		28	1,716	19	1,735	99	1
02/16/82	LN	14	255	14	269	95	5
		15	235	14	249	94	6
		16	1,286	14	1,300	99	1
08/19/82	LN	17	2,318	.5	2,318	100	0
		18	2,456	.5	2,456	100	0
		19	2,617	.5	2,618	100	0
01/06/83	NN	4	0	24	24	0	100
		5	0	23	23	0	100
		6	0	21	21	0	100
08/29/83	LN	27	1,482	8.2	1,490	99	1
		28	1,888	8.2	1,896	99.6	.04
		29	1,659	7.4	1,664	99.7	.03
03/06/84	NN	4	0	27	27	0	100
		5	111	53	164	68	32
		6	79	22	101	78	22
08/17/84	LN	15	1,326	.45	1,326	99.96	.04
		16	1,503	.24	1,503	99.98	.02
		17	1,404	.24	1,404	99.98	.02
10/10/84	RO	8	1,076	6.9	1,083	99	1
		9	0	123	123	0	100
		10	0	491	491	0	100
10/24/84	RO	22	0	614	614	0	100
		23	0	491	491	0	100
		24	0	491	491	0	100

Table 3.--Classification of surveys for Town Lake

[NN, no release/little runoff; LN, large release/little runoff; RO, runoff; ft^3/s, cubic feet per second]

Sample date	Classification	Sample date and previous 2 days	Releases to lake (ft^3/s)	Local runoff to lake (ft^3/s)	Barton Springs flow to lake (ft^3/s)	Total inflow to lake (ft^3/s)	Releases as percentage of total inflow	Runoff as percentage of total inflow	Barton Springs flow as percent of total inflow
02/03/75		1	2,322	321	96	2,739	85	12	3
		2	2,249	1,356	96	3,701	61	37	2
		3	4,724	1,046	96	5,866	80	18	2
06/12/75	LN	10	7,306	89	106	7,501	97	1	2
		11	6,285	81	108	6,474	97	1	2
		12	5,837	66	110	6,013	97	1	2
08/12/75		10	1,006	43	113	1,162	86	4	10
		11	1,010	38	113	1,161	87	3	10
		12	1,013	39	113	1,165	87	3	10
01/06/76	NN	4	0	17	67	84	0	20	80
		5	0	19	67	86	0	22	78
		6	0	23	67	90	0	26	74
04/20/76	RO	18	1,791	4,688	63	6,542	27	72	1
		19	0	139	64	203	0	68	32
		20	636	852	65	1,553	41	55	4
09/01/76		30	1,896	70	90	2,056	92	3	5
		31	1,896	19	90	2,005	95	1	4
		1	1,895	17	90	2,002	95	1	4
09/02/76		31	1,896	19	90	2,005	95	1	4
		1	1,895	17	90	2,002	95	1	4
		2	1,899	930	90	2,919	65	32	3
12/28/76		26	0	26	98	124	0	21	79
		27	324	26	98	448	72	6	22
		28	248	27	98	373	67	7	26
04/26/77	LN	24	10,185	303	107	10,595	96	3	1
		25	5,140	262	107	5,509	93	5	2
		26	5,550	224	107	5,881	94	4	2
08/23/77	LN	21	1,804	0	87	1,891	95	0	5
		22	1,806	0	87	1,893	95	0	5
		23	1,798	0	87	1,885	95	0	5
12/29/77	LN	27	206	.44	45	251	82	0	18
		28	124	1.6	45	171	73	1	26
		29	0	2.3	45	47	0	5	95
04/10/78		8	1,599	.25	31	1,630	98	0	2
		9	1,600	.31	31	1,631	98	0	2
		10	1,033	358	31	1,422	73	25	2
07/18/78	LN	16	1,007	0	20	1,027	98	0	2
		17	1,005	0	20	1,025	98	0	2
		18	998	0	20	1,018	98	0	2
10/16/78	NN	14	0	.25	25	25	0	1	99
		15	0	.19	25	25	0	1	99
		16	0	.25	24	24	0	1	99
02/07/79		5	304	189	74	567	54	33	13
		6	0	422	84	506	0	83	17
		7	314	266	85	665	47	40	13
05/29/79		27	998	110	106	1,214	82	9	9
		28	1,496	112	106	1,714	87	7	6
		29	1,501	98	106	1,705	88	6	6
08/22/79	LN	20	1,818	.69	93	1,912	95	0	5
		21	1,818	.44	92	1,910	95	0	5
		22	1,818	.50	92	1,910	95	0	5

Table 3.--Classification of surveys for Town Lake--Continued

Sample date	Classification	Sample date and previous 2 days	Releases to lake (ft^3/s)	Local runoff to lake (ft^3/s)	Barton Springs flow to lake (ft^3/s)	Total inflow to lake (ft^3/s)	Releases as percentage of total inflow	Runoff as percentage of total inflow	[1] Barton Springs flow as percent of total inflow
07/27/79	RO	25	700	.69	95	796	88	0	12
		26	0	.29	94	123	0	24	76
		27	400	432	96	928	43	47	10
03/03/80		1	0	.94	36	37	0	3	97
		2	0	.38	36	36	0	1	99
		3	573	.44	36	609	94	0	6
03/28/80		26	601	.75	34	636	95	0	5
		27	83	721	34	838	10	86	4
		28	599	76	36	711	84	11	5
05/19/80		17	251	268	73	592	42	46	12
		18	0	210	74	284	0	74	26
		19	634	196	75	905	70	22	8
07/31/80	LN	29	1,458	.25	51	1,509	97	0	3
		30	1,453	.19	51	1,504	97	0	3
		31	1,554	.13	51	1,605	97	0	3
03/04/81	RO	2	0	20	55	75	0	27	73
		3	1,685	433	55	2,173	77	20	3
		4	3,360	598	59	4,017	84	15	2
04/27/81	LN	25	1,787	10	62	1,859	96	1	3
		26	1,787	7.8	62	1,857	96	1	3
		27	1,804	6.7	61	1,872	96	1	3
05/26/81	RO	24	8,135	5,301	53	13,489	60	39	1
		25	1,139	4,106	55	5,300	22	77	1
		26	1,903	223	57	2,183	87	10	3
02/17/82		15	161	.25	53	214	75	0	25
		16	562	.31	53	615	91	0	9
		17	451	.31	53	504	89	0	11
08/20/82	IN	18	2,157	.25	43	2,200	98	0	2
		19	2,214	.25	43	2,257	98	0	2
		20	2,198	.25	43	2,241	98	0	2
01/06/83	NN	4	0	2.3	45	47	0	5	95
		5	0	2.3	45	47	0	5	95
		6	0	2.0	45	47	0	4	96
08/30/83	IN	28	1,496	.75	68	1,565	96	0	4
		29	1,496	.94	67	1,564	96	0	4
		30	1,496	1.3	67	1,564	96	0	4
03/07/84	NN	5	0	6.3	34	40	0	16	84
		6	0	3.4	34	37	0	9	91
		7	0	3.4	34	37	0	9	91
08/20/84	IN	18	1,121	1.0	26	1,148	98	0	2
		19	1,120	.50	26	1,146	98	0	2
		20	1,113	.38	26	1,139	98	0	2
10/11/84	RO	9	279	.63	30	310	90	0	10
		10	455	236	32	723	63	33	4
		11	455	633	34	1,122	41	56	3

(WATSTORE). The SAS computer system provides data-management functions such as sorting, merging, copying, and condensing sets of data.

Some of the nutrient and much of the trace-element data are reported by the laboratory and stored in the Geological Survey's WATSTORE files as "less than" (<) values or as not detected (ND). The "less than" values indicate that the constituent concentration at the time of analysis was less than the lower limit of detection for that particular constituent using prescribed analytical methodology. The "ND" values indicate that a lower limit of detection for that constituent had not been established at the time of analysis, and the constituent could not be "detected" using the prescribed analytical methodology.

Computer programs using the Statistical Analysis System performed statistical calculations and regression analysis to determine volume-weighted-average concentrations of selected water-quality constituents in lakes and reservoirs (Wells and Schertz, 1984). This procedure was used to determine volume-weighted-average concentrations of dissolved solids and nutrients.

WATER QUALITY

Thermal Stratification

Some of the factors controlling the quality of water in a lake or reservoir include the quantity and quality of inflow, the circulation pattern of the lake, the chemical reactions of the water with the bed material, precipitation, and evaporation. Impoundment of water in a lake or reservoir may result in beneficial, as well as detrimental, changes in the quality of the water. Many of the detrimental effects of impoundment can be attributed to layering of the water or thermal stratification due to temperature-induced density differences. The density of pure water is greatest at a temperature of about 4 °C, and the difference in density per 1 °C is greater at warmer temperatures than at cooler temperatures as shown in the following table (Weast, 1975, p. F-5):

Temperature (degrees Celsius)	Density (grams per milliliter)
0.0	0.999868
4.0	1.000000
5.0	0.999992
10.0	0.999728
15.0	0.999129
20.0	0.998234
25.0	0.997075
30.0	0.995678
35.0	0.994063

Thermal stratification is common in lakes and reservoirs where the density of the upper and lower strata of water differs by as little as 0.001

to 0.002 gram per milliliter. Therefore, temperature differences of 3 to 4 °C during the summer may result in stable stratification.

Thermal stratification may occur in many patterns, depending upon the geographical location, climatological conditions, depth, and surface area, as well as the physical and chemical characteristics of the inflow waters. During the winter, lakes and reservoirs in Texas generally are well mixed by strong north winds, and the water is uniform in temperature (isothermal) and density. With the onset of spring, solar heating warms the water at the lake or reservoir surface, causing a decrease in density. This warm water at the surface tends to float on the colder, more dense water, and the mixing action of spring winds, usually the strongest of the year, are diminished. As water near the surface becomes progressively warmer, the density gradient increases and the depth to which wind can mix the water decreases. Typically, by late summer the winds are weakest, density differences are greatest, and the reservoir is separated into three fairly distinct strata:

(1) The epilimnion--a warm, freely circulating surface stratum;
(2) The metalimnion--a middle stratum characterized by a rapid decrease in temperature with increase in depth; and
(3) The hypolimnion--a cold, stagnant lower stratum.

Thermal stratification in deep lakes or reservoirs usually persists until fall, when a decrease in atmospheric temperature cools the water at the surface in the reservoir and the inflow from streams. The temperatures and densities of the epilimnion and metalimnion then approach those of the hypolimnion, and the resistance to mixing is decreased and complete mixing or overturn of the water occurs.

Water-temperature data for Lake Austin at site Ac and Town Lake at site Ac and air-temperature data collected by the National Weather Service at the Austin Municipal Airport are shown in figure 8. These data indicate that seasonal variations in water temperature in the two lakes closely parallel seasonal variations in air temperature. The smallest differences in water temperature between water near the surface and near the bottom at these two locations generally occur during the winter and spring, and the largest differences generally occur during the summer (fig. 8). The largest observed temperature variation between water near the surface and water near the bottom at site Ac on Lake Austin during summer surveys was 6.5 °C. Temperature variations between the water near the surface and water near the bottom on Town Lake did not exceed 3.5 °C. The rather small variations in temperature for the two lakes can be attributed to the rather shallow depths in both lakes and the short retention time of water in the lakes during the summer months. These factors were responsible for the observation that Lake Austin and Town Lake did not form a true hypolimnion during the study period. The maximum differences between surface and bottom temperatures were not as large as differences observed in deep lakes in Central Texas such as Lake Belton (Mendieta and Pate, 1982) where the differences may exceed 10 °C. The small differences between surface and bottom temperatures on Town Lake compare favorably with Lake Somerville (McPherson and Mendiata, 1983). Lake Somerville, approximately 100 mi east of Austin, is a shallow lake similar to Lake Austin and Town Lake. Vertical differences for typical summer surveys at site Ac frequently were 1.5 °C or less.

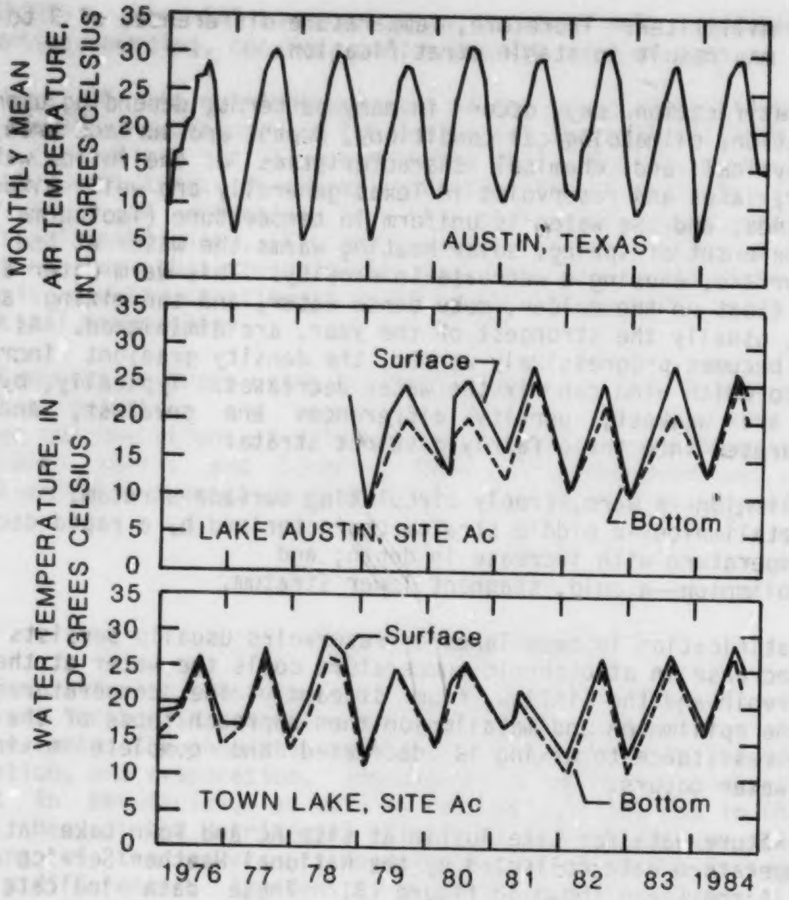

Figure 8.--Variations in monthly mean air temperature at Austin and water temperature at selected sites for Lake Austin and Town Lake, 1975-84.

In addition to the warming of water at the surface by solar heating, thermal-density gradients in a lake also may occur because of differences in water temperatures of the lake and of the inflow to the lake or reservoir. Water incoming to stored water will flow into a layer where the density is most similar to the incomming water density. The water density is governed by the temperature and dissolved- and suspended-solids concentrations. The movement of water to achieve density equilibrium is referred to as a density current. Density currents may move water as an overflow on top of the water in storage, as an underflow at the bottom of the lake, or as an interflow plume at an intermediate depth (Wetzel, 1975).

Data collected during the period of record indicate that, at times, there may have been some underflow patterns in Lake Austin, especially during the warmer summer months. The releasing penstocks in Mansfield Dam are 50 to 60 ft above the bottom of the lake and 120 ft below the conservation-pool surface level. These penstocks are below the thermocline of Lake Travis during the summer, causing water to be drawn and released to Lake Austin from the hypolimnion where temperatures are much cooler than water at the surface. For example, during the survey of August 29, 1983, the areal temperature profile from data collected along the drowned river channel in Lake Austin indicated that the cold water released from Mansfield Dam began to underflow the warmer surface water approximately 10 river miles downstream from the dam (fig. 9). At site Ec, immediately downstream from Mansfield Dam, water temperatures were 18.0 °C from surface to bottom. At site Dc, approximately 8 mi downstream from Mansfield Dam, water temperatures were a uniform 19.5 °C from surface to bottom. At site Cc, approximately 14 mi downstream from the dam, water temperatures ranged from 26.5 °C at the surface to 20.5 °C at a depth of 10 ft, and remained at 20.5 °C to a depth of 28 ft near the bottom. This rather sharp and shallow thermocline also existed farther downstream to Tom Miller Dam. Water releases during August 27-29, 1983, totaled 9,975 acre-ft, which would account for approximately 25 percent of the water in the lake, or a mean retention time of approximately 4 days. The underflow theory is supported during this survey, because if surface-water temperatures were warming at a uniform rate, a 7.0 °C change in temperature would not exist in the 6-mi reach between site Cc and site Dc. Also, typical thermoclines in lakes in Central Texas usually occur at depths of 30 to 50 ft below the surface (McPherson and Mendieta, 1983; and Roddy and Waddell, 1982).

Dissolved Oxygen

Dissolved oxygen is required by fish and other aquatic organisms to maintain the metabolic processes that produce energy for growth and reproduction. There is no specific dissolved-oxygen concentration that is favorable to all species and ecosystems. However, small dissolved-oxygen concentrations are unfavorable to almost all aquatic organisms. The U.S. Environmental Protection Agency (1986a) has recommended 5.0 mg/L (milligrams per liter) as a minimum concentration to maintain a healthy fish population. Moreover, the concentration of some chemical constituents dissolved in water are related to the concentration of dissolved oxygen; therefore, dissolved oxygen is one of the most important factors that affect the quality of water in a lake or reservoir.

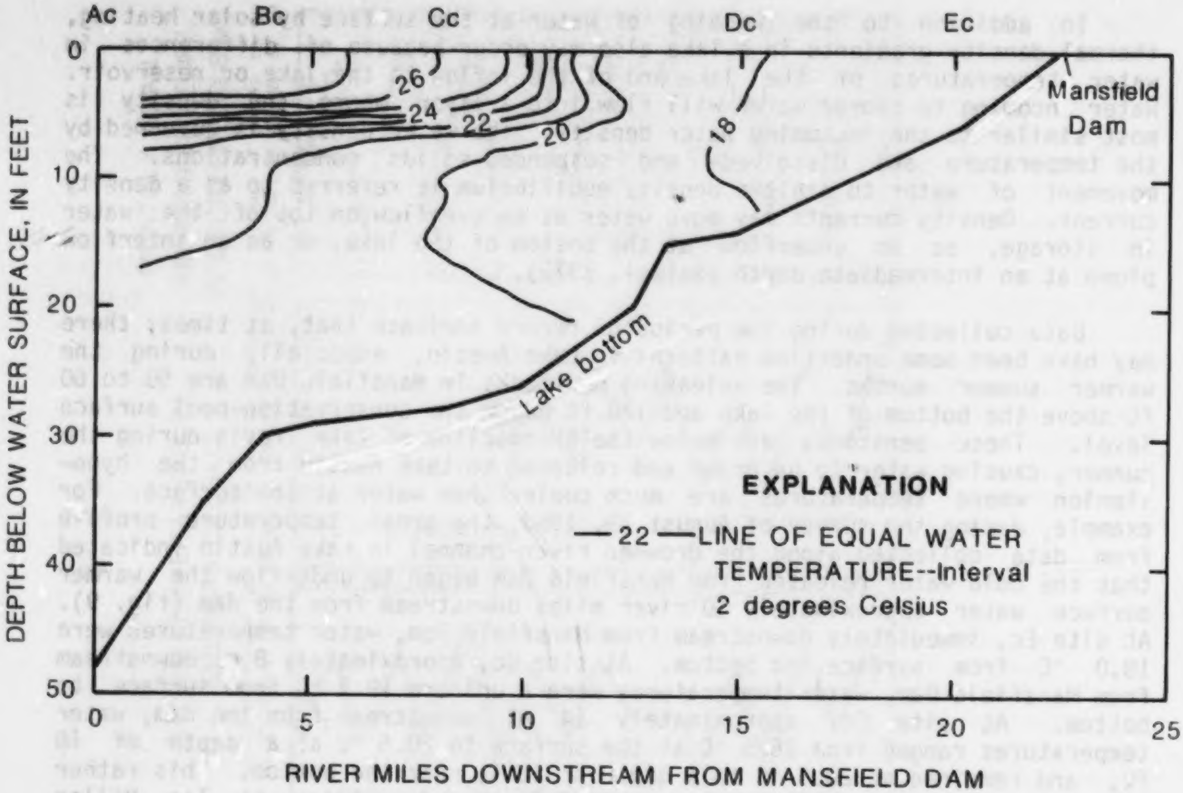

Figure 9.--Patterns of water temperature in Lake Austin, August 29,1983.

The distribution of dissolved oxygen in a lake or reservoir is related to thermal stratification. Much of the oxygen enters at the air-water interface by absorption from the atmosphere. A significant quantity of oxygen also may be produced as a by-product of photosynthesis. During winter circulation, the water repeatedly is exposed to the atmosphere, and dissolved oxygen used in the decomposition of organic matter is replenished. In deep lakes during spring and summer, thermal statification may cause a decrease in the vertical circulation of the water. Oxygen utilized in the decomposition of organic material is not replaced in the deep stratum of the lake, and a vertical dissolved-oxygen gradient develops.

Dissolved-oxygen data for Lake Austin and Town Lake are presented in figures 10-13 and in tables 11-59 (Supplemental Information). These data indicate that dissolved-oxygen concentrations varied seasonally and areally. Commonly, large dissolved-oxygen gradients occur in deep lakes in Texas during the warm summer months. Because of the shallowness of Lake Austin and Town Lake and the relatively short retention time of water in the lakes during the summer, large dissolved-oxygen gradients were not detected. Most summer surveys detected only a slight decline in oxygen concentration from surface to bottom. For example, average dissolved-oxygen concentration for Lake Austin at site Ac had about a 2.5 mg/L variation from surface to bottom during the summer surveys (fig. 10). Average dissolved-oxygen concentrations for Town Lake at site Ac varied about 1 mg/L from surface to bottom (fig. 11). Small variations were noted in concentrations of dissolved oxygen from surface to bottom in both lakes during the winter months. Vertical dissolved-oxygen and temperature profiles for sites Ac in Lake Austin and Town Lake for the 1979 and 1980 surveys are shown in figures 12 and 13. These data indicate that the smallest gradients occurred in the winter and the largest in spring and summer.

Small areal variations were also noted in dissolved-oxygen concentrations in Lake Austin and Town Lake. The largest areal variation occurred in Lake Austin during the summer. Average surface-water dissolved-oxygen concentrations increased from about 5.0 mg/L at site Ec to slightly more than 7 mg/L at site Ac during the summer (fig. 10). This increase in dissolved oxygen as the water moves through Lake Austin can be attributed to reaeration from the atmosphere and to photosynthetic production of oxygen by aquatic plants. Areal variation of average dissolved-oxygen concentrations in Town Lake was less than 1.0 mg/L during the winter and summer.

Dissolved-oxygen concentrations in Lake Austin frequently are affected by releases from Lake Travis, particulary during late spring and summer when the release water is below the thermocline. Surface concentrations of dissolved oxygen (fig. 10) increase in a downstream direction during the summer. For example, water entering the lake at site Ec during August 1984 had a dissolved oxygen concentration of 2.8 mg/L (table 25). Concentrations gradually increased downstream until the maximum observed dissolved-oxygen concentration of more than 7 mg/L was detected at site Bc.

Similar increases were noted in dissolved-oxygen concentrations in Town Lake during periods of release from Lake Austin. For example, in August 1984 the dissolved-oxygen concentration at the surface at site Ec was 5.8 mg/L (table 58). Concentrations of dissolved oxygen at the surface of Town Lake gradually increased in a downstream direction, and the maximum concentration

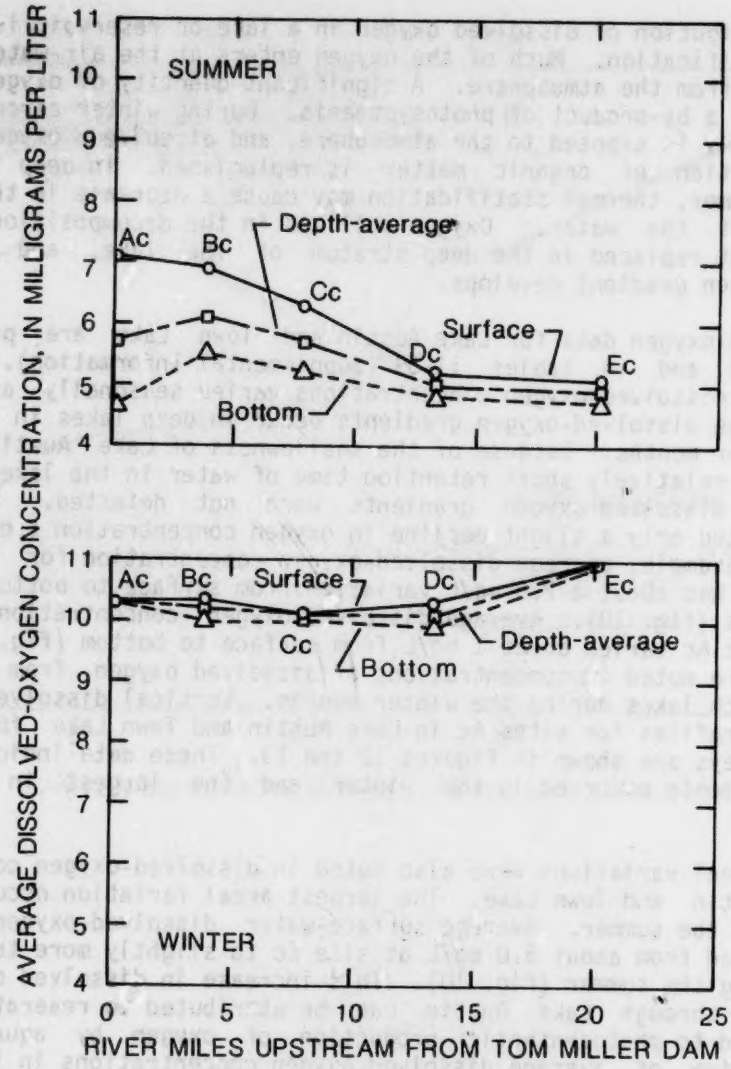

Figure 10.--Variations of average dissolved-oxygen concentrations during summer and winter surveys of Lake Austin.

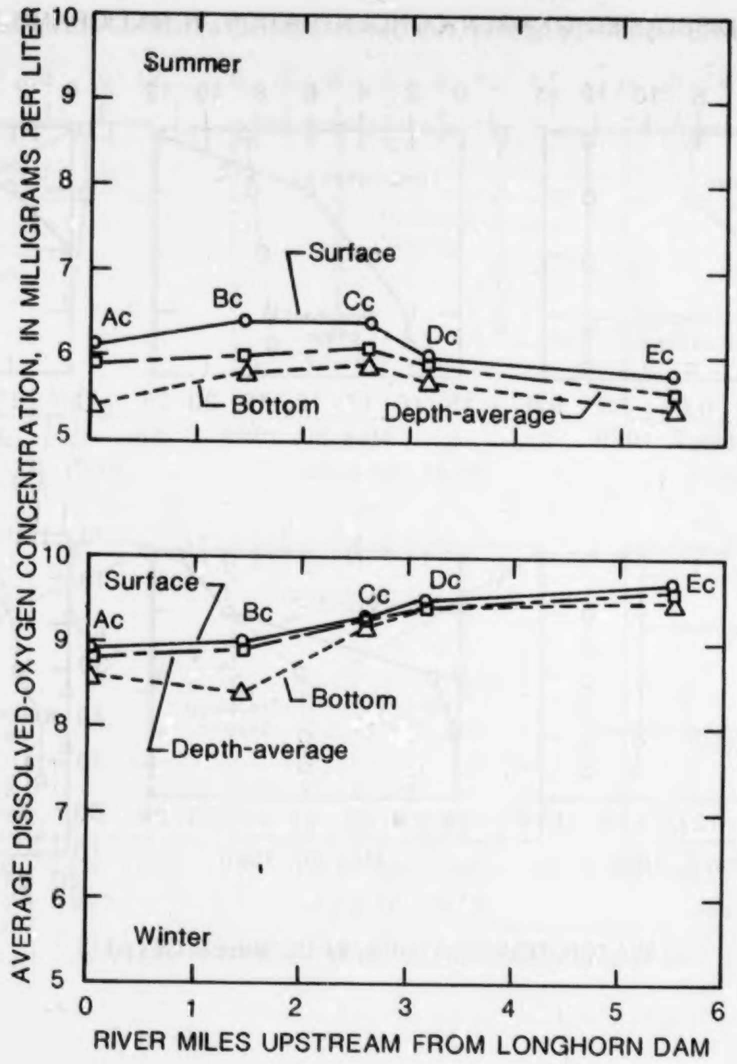

Figure 11.--Variations of average dissolved-oxygen concentrations during summer and winter surveys of Town Lake.

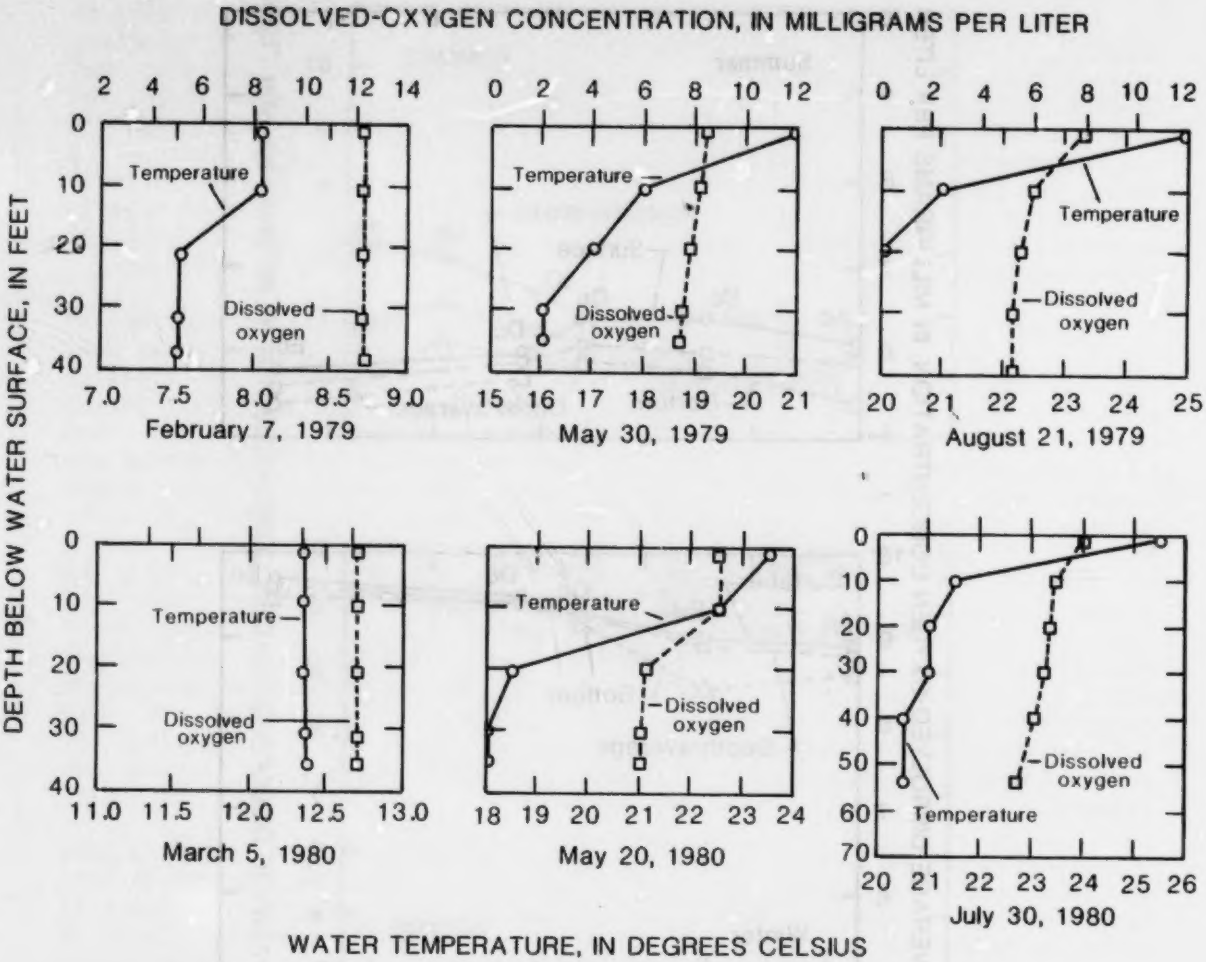

Figure 12.--Seasonal profiles of water temperature and dissolved oxygen in Lake Austin site Ac.

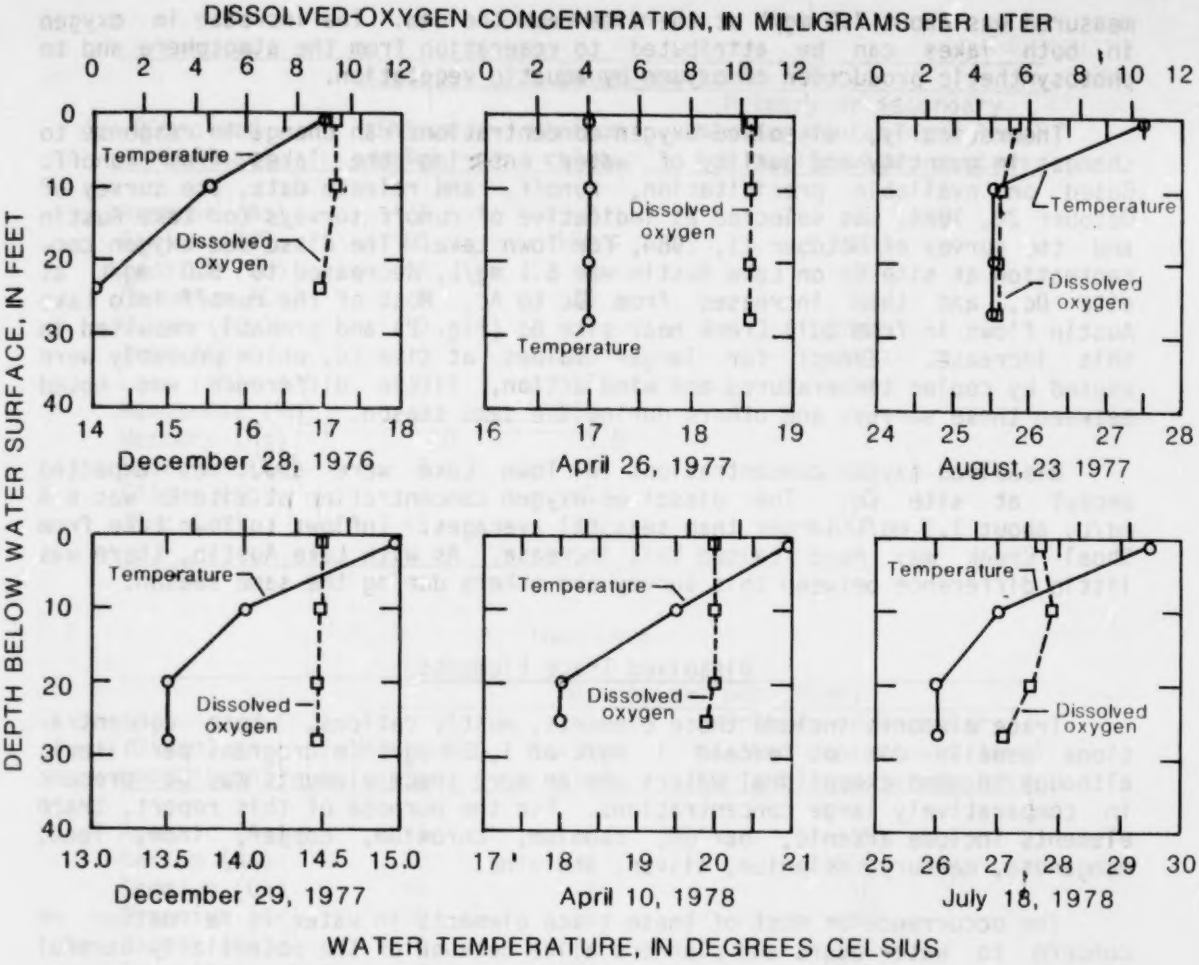

Figure 13.--Seasonal profiles of water temperature and dissolved oxygen in Town Lake site Ac.

measured was about 7.0 mg/L at the site near the dam. The increase in oxygen in both lakes can be attributed to reaeration from the atmosphere and to photosynthetic production of oxygen by aquatic vegetation.

Theoretically, dissolved-oxygen concentrations can change in response to changes in quantity and quality of water entering the lakes from runoff. Based on available precipitation, runoff, and release data, the survey of October 24, 1984, was selected as indicative of runoff surveys for Lake Austin and the survey of October 11, 1984, for Town Lake. The dissolved-oxygen concentration at site Ec on Lake Austin was 6.1 mg/L, decreased to 5.0 mg/L at site Dc, and then increased from Dc to Ac. Most of the runoff into Lake Austin flows in from Bull Creek near site Bc (fig. 2) and probably resulted in this increase. Except for larger values at site Ec, which probably were caused by cooler temperatures and wind action, little difference was noted between these surveys and others during the same season.

Dissolved-oxygen concentrations in Town Lake were about as expected except at site Cc. The dissolved-oxygen concentration at site Cc was 6.5 mg/L, about 1.5 mg/L larger than seasonal averages. Inflows to Town Lake from Shoal Creek may have caused this increase. As with Lake Austin, there was little difference between this survey and others during the same season.

Dissolved Trace Elements

Trace elements include those elements, mostly cations, whose concentrations usually do not exceed 1 mg/L or 1,000 µg/L (micrograms per liter), although in some exceptional waters one or more trace elements may be present in comparatively large concentrations. For the purpose of this report, trace elements include arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, selenium, silver, and zinc.

The occurrence of most of these trace elements in water is a matter of concern to water users and planners alike because of the potentially harmful effects of excessive concentrations on human and aquatic life. Large concentrations of trace elements in water may render it unsuitable as a public water supply. Many trace elements also may be concentrated at successive steps in the aquatic food chain, making fish and other aquatic life undesirable for human consumption.

Results of analyses for dissolved trace elements in water samples collected from near the surface and near the bottom at sites Ac and Ec on Lake Austin and Town Lake are presented in tables 11-59 (Supplemental Information) and are summarized in the following tables:

Lake Austin

	(micrograms per liter)		
Dissolved constituent	Minimum value	Maximum value	Primary or secondary maximum contaminant level for public water systems
Arsenic (As)	1	2	50
Barium (Ba)	60	100	1,000
Cadmium (Cd)	<1	<2	10
Chromium (Cr)	0	30	50
Copper (Cu)	0	7	1,000
Iron (Fe)	0	200	300
Lead (Pb)	0	17	50
Manganese (Mn)	0	110	50
Mercury (Hg)	.0	3.6	2
Selenium (Se)	0	<1	10
Silver (Ag)	0	<1	50
Zinc (Zn)	<3	30	5,000

Town Lake

	(micrograms per liter)		
Dissolved constituent	Minimum value	Maximum value	Primary or secondary maximum contaminant level for public water systems
Arsenic (As)	<1	2	50
Barium (Ba)	0	30	1,000
Cadmium (Ca)	<1	2	10
Chromium (Cr)	0	30	50
Copper (Cu)	0	9	1,000
Iron (Fe)	0	250	300
Lead (Pb)	0	9	50
Manganese (Mn)	0	60	50
Mercury (Hg)	.0	<.5	2
Selenium (Se)	0	<1	10
Silver (Ag)	0	1	50
Zinc (Zn)	<3	70	5,000

This summary indicates that, except for dissolved manganese in Lake Austin and Town Lake and dissolved mercury in Lake Austin, none of the trace elements exceeded either the primary maximum contaminant level or secondary maximum contaminant level set by the U.S. Environmental Protection Agency for public water systems (1986b,c). These large concentrations of manganese and mercury were single occurrences and were not detected regularly.

The occurrence and distribution of dissolved iron and dissolved manganese in lake water often are related inversely to the dissolved-oxygen concentrations. During thermal stratification, the oxygen utilized in the decomposition of organic material is not replenished, and reducing conditions often result in the dissolution of large quantities of iron and manganese from bottom sediments. During circulation, oxygen is replenished throughout the depth of the lake, and dissolved iron and dissolved manganese are oxidized and settle to the bottom of the lake.

During winter circulation, dissolved-oxygen concentrations are large, and dissolved-iron and dissolved-manganese concentrations in water throughout Lake Austin and Town Lake usually averaged less than 20 μg/L, as shown in figures 14 to 17. The concentration of both constituents in water near the surface of Lake Austin and Town Lake averaged about 10 μg/L throughout the lakes.

The average summer concentrations of dissolved iron for Lake Austin in the water near the surface ranged from 2.9 μg/L at site Ac to about 30 μg/L at site Bc (fig. 14). The average summer concentrations of dissolved manganese near the surface did not exceed 15 μg/L (fig. 15). In water near the bottom, average dissolved-iron concentrations did not exceed 40 μg/L (fig. 14). Average dissolved manganese in water near the bottom ranged from approximately 50 μg/L at site Ac to 15 μg/L at site Ec (fig. 15).

Summer surveys on Town Lake indicated that the mean concentrations of dissolved iron in water near the surface ranged from 7.6 μg/L at site Ac to about 5 μg/L at site Ec (fig. 16). The average concentrations of dissolved manganese in water near the surface during these surveys did not exceed 6.0 μg/L (fig. 17). The mean concentrations of dissolved iron in water near the bottom did not exceed 40 μg/L during summer surveys. The mean concentration of dissolved manganese in water near the bottom ranged from approximately 18 μg/L at site Ac to 1 μg/L at site Ec during summer surveys.

At sites Ac near Tom Miller Dam on Lake Austin and Longhorn Dam on Town Lake, the concentrations of dissolved iron near the bottom ranged from 0 to 200 μg/L (fig. 18) and from 0 to 250 μg/L (fig. 19), respectively. The concentrations of dissolved manganese ranged from 0 to 110 μg/L for Lake Austin (fig. 18) and from 0 to 60 μg/L for Town Lake (fig. 19). There was no apparent increase in concentrations of dissolved iron or dissolved manganese at site AC on either lake during the period of record. As stated earlier, small temperature differences, shallow depths, and short retention times prevented typical stratification during the study period. Therefore, dissolved-iron and dissolved-manganese concentrations were relatively small compared to deep lakes in central Texas like Lake Belton, where summer concentrations at the bottom reach 500 μg/L for both constituents (Mendieta and Pate, 1982). Concentrations more closely resembled patterns detected in Lake Somerville, a relatively shallow lake where bottom concentrations of dissolved iron and dissolved manganese rarely exceeded 250 μg/L at site Ac (McPherson and Mendieta, 1983).

Total Nutrients

Nitrogen and phosphorus are nutrients of primary interest because of their ability to promote or limit growth of bacteria and aquatic vegetation. The major species of nitrogen and phosphorus commonly are detected in all water in small concentrations. Sources that may contribute nitrogen and phosphorus to a reservoir include runoff from urban and agricultural areas, sewage effluent, industrial wastes, precipitation, decomposing plant and

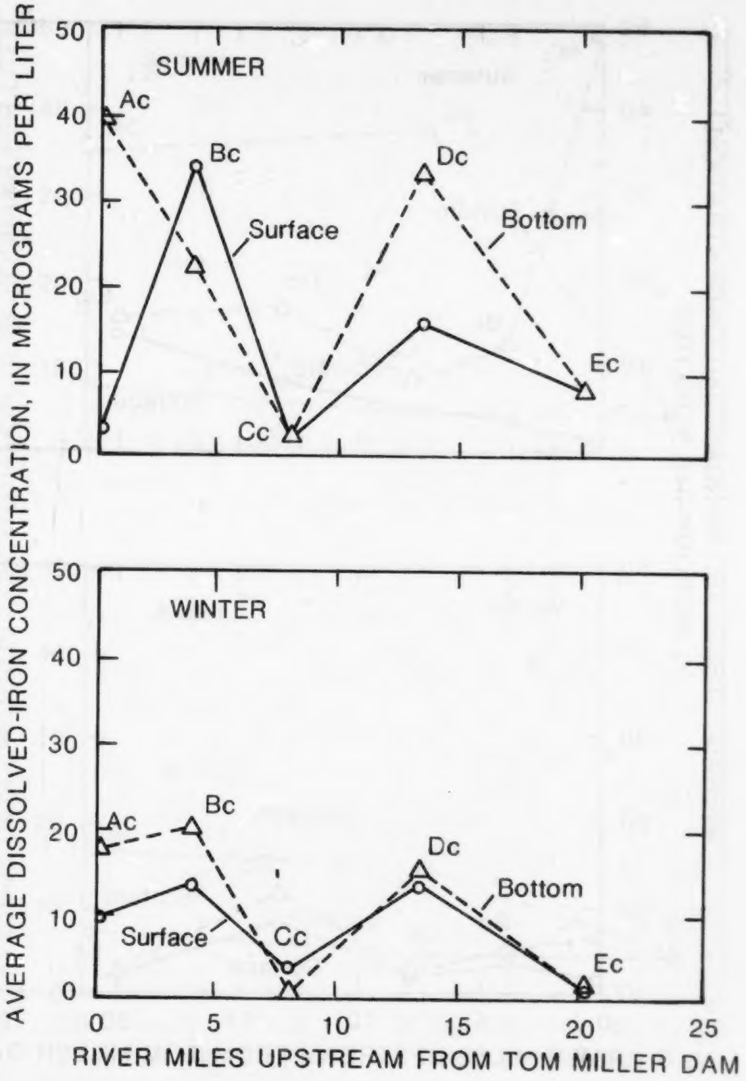

Figure 14.--Variations of average concentrations of dissolved iron during summer and winter surveys of Lake Austin.

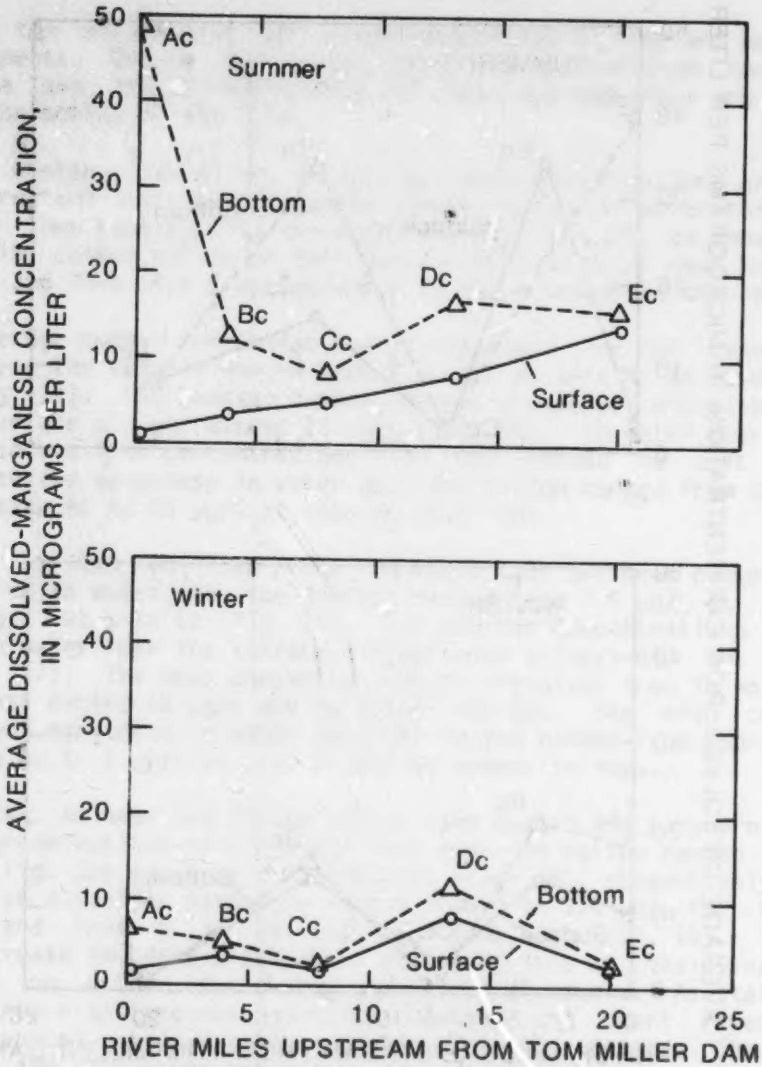

Figure 15.--Variations of average concentrations of dissolved manganese during summer and winter surveys of Lake Austin.

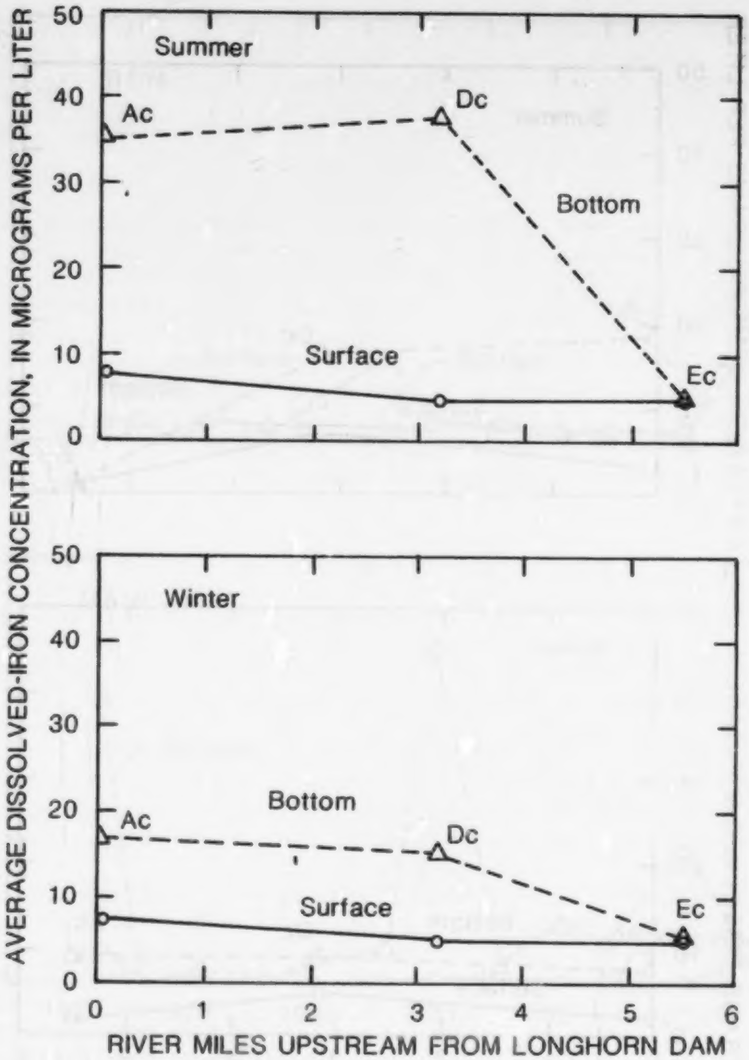

Figure 16.--Variations of average concentrations of dissolved iron during summer and winter surveys of Town Lake.

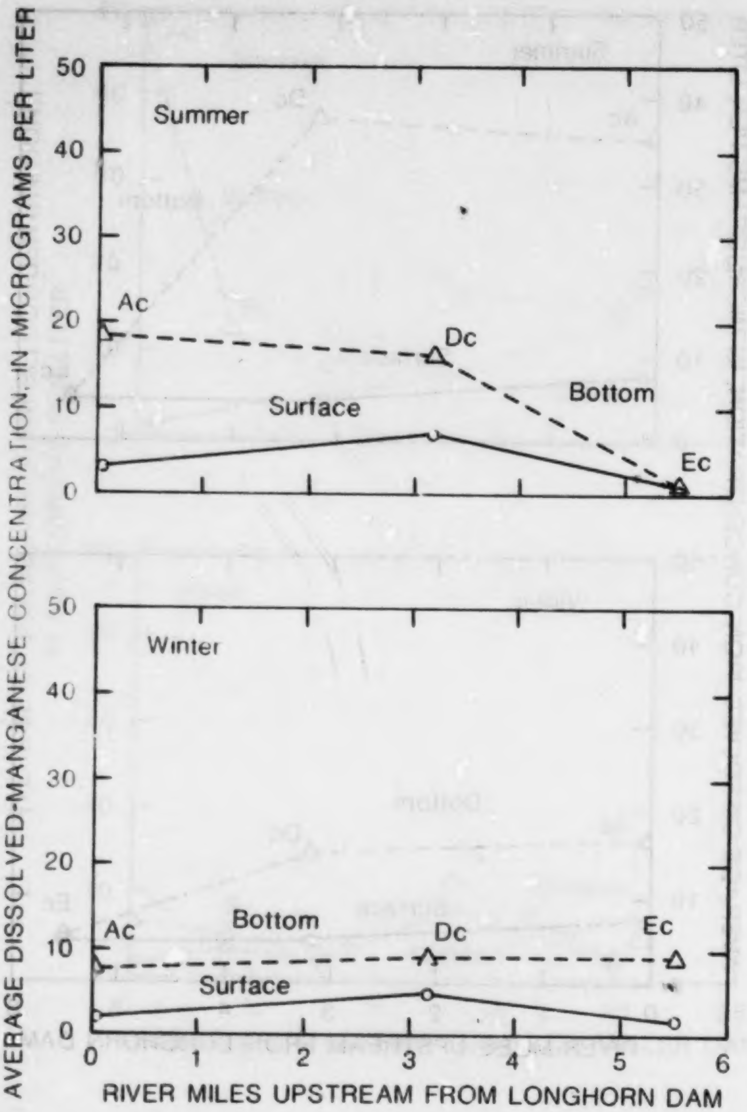

Figure 17.--Variations of average concentrations of dissolved manganese during summer and winter surveys of Town Lake.

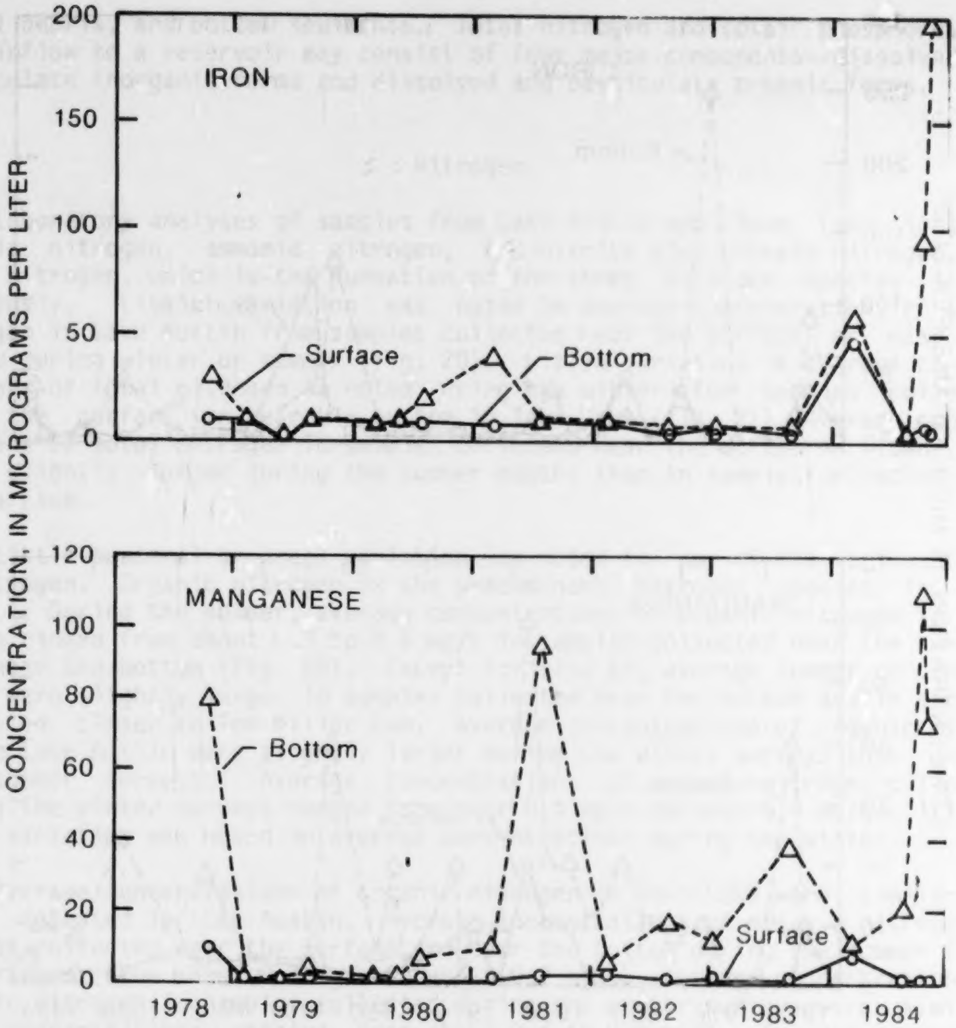

Figure 18.--Variations of concentrations of dissolved iron and dissolved manganese in Lake Austin site Ac.

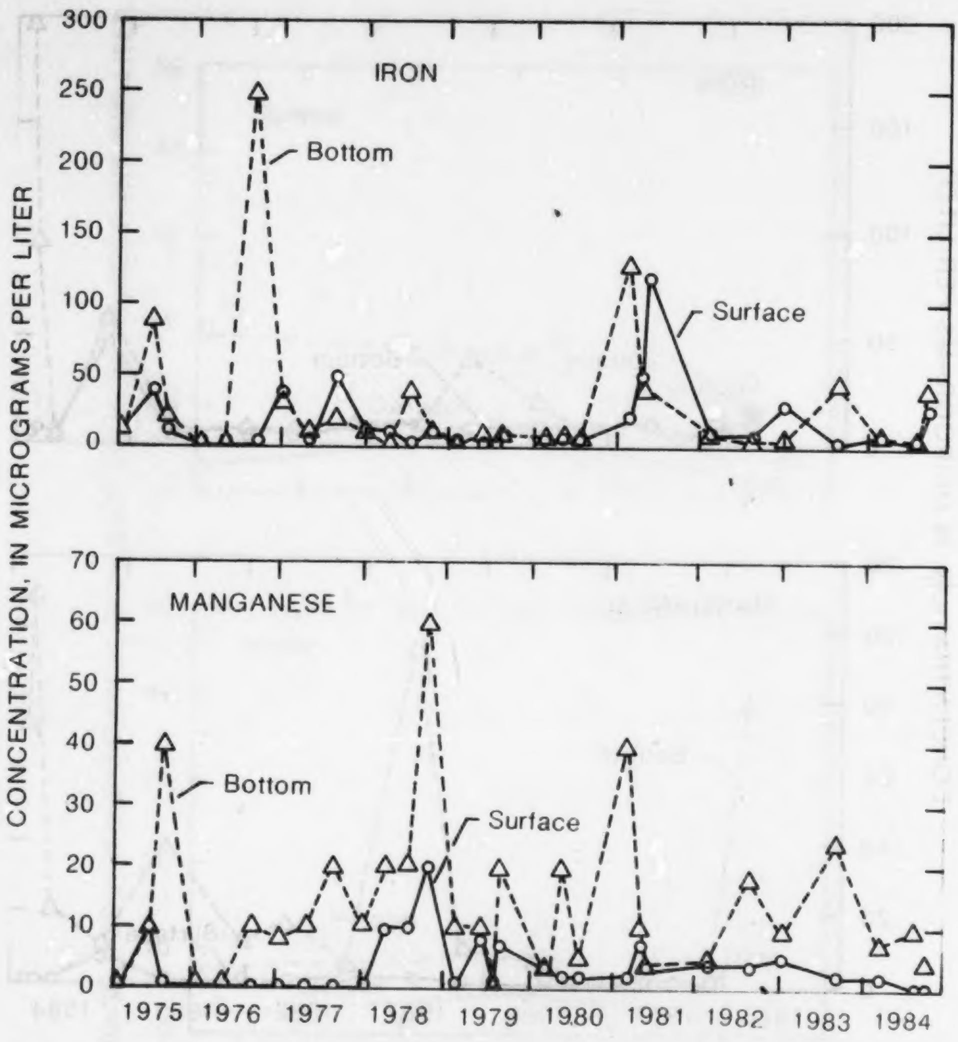

Figure 19.--Variations of concentrations of dissolved iron and dissolved manganese in Town Lake site Ac.

animal debris, and bottom sediments. Total nitrogen and total phosphorus in the inflow to a reservoir may consist of four major components--dissolved and particulate inorganic forms and dissolved and particulate organic forms.

Nitrogen

Laboratory analyses of samples from Lake Austin and Town Lake included organic nitrogen, ammonia nitrogen, and nitrite plus nitrate nitrogen, and total nitrogen, which is the summation of the three nitrogen species listed previously. Little variation was noted in average concentrations of total nitrogen in Lake Austin from samples collected near the surface or near the bottom during winter or summer (fig. 20). Little variation in average concentrations of total nitrogen is noted during the winter for samples collected near the surface or near the bottom in Town Lake (fig. 21). Average concentrations of total nitrogen in samples collected near the bottom in Town Lake were slightly larger during the summer months than in samples collected near the surface.

Little seasonal or areal variation was noted for any of the various forms of nitrogen. Organic nitrogen is the predominant nitrogen species in both lakes. During the summer, average concentrations of organic nitrogen in Lake Austin ranged from about 0.3 to 0.6 mg/L in samples collected near the surface and near the bottom (fig. 20). Except for site Ec, average summer concentrations were slightly larger in samples collected near the bottom and in samples collected closer to Tom Miller Dam. Average concentrations of organic nitrogen in Lake Austin were slightly larger during the winter surveys than during the summer surveys. Average concentrations of organic nitrogen collected during the winter surveys ranged from near 0.4 mg/L to near 0.8 mg/L. Little areal variation was noted in average concentrations during the winter.

Average concentrations of organic nitrogen in Town Lake were similar to those detected in Lake Austin. Average concentrations of organic nitrogen in samples collected near the surface and near the bottom during the summer (fig. 21) ranged from about 0.4 mg/L to about 0.7 mg/L. Average concentrations of organic nitrogen in samples collected during the winter surveys were similar, with concentrations ranging from about 0.4 to 0.8 mg/L. Average concentrations of organic nitrogen were slightly larger in samples collected near the bottom than those collected near the surface. Little areal variation was noted in concentrations of organic nitrogen, although concentrations were slightly larger in samples collected in the headwaters of Town Lake than in those collected near the outflow.

Little seasonal or areal variation was detected in average concentrations of ammonia nitrogen in either lake (figs. 22 and 23). Average concentrations of ammonia nitrogen were slightly larger in Lake Austin during the summer than during the winter. Little difference in average concentrations of ammonia nitrogen was noted between the two lakes. Little seasonal or areal variation was noted in average concentrations of nitrite plus nitrate nitrogen in Lake Austin or Town Lake. Concentrations of nitrite plus nitrate nitrogen were slightly larger in Town Lake than in Lake Austin. The largest concentrations of nitrite plus nitrate nitrogen in Town Lake were in samples collected near the bottom during the summer surveys (0.39 mg/L) and in samples collected near the surface during winter surveys (0.77 mg/L).

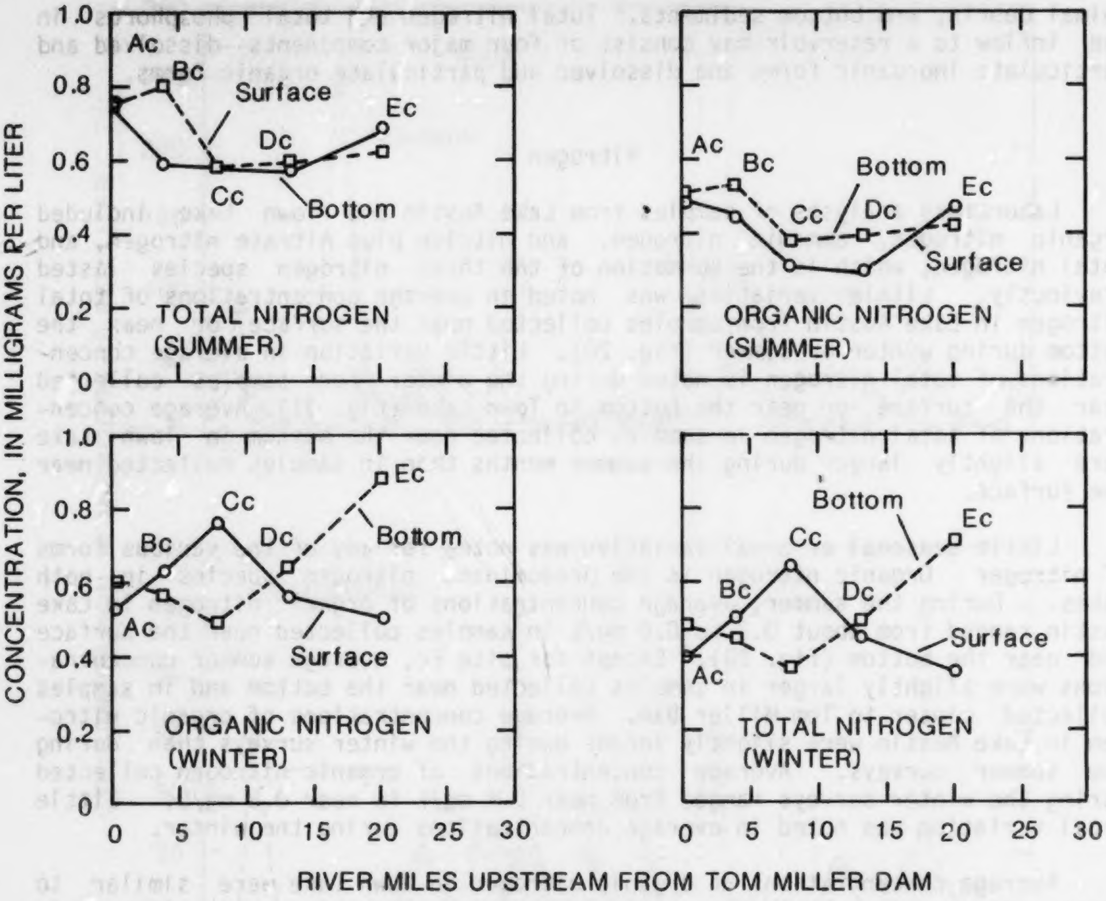

Figure 20.--Variations of average concentrations of total nitrogen and organic nitrogen during summer and winter surveys of Lake Austin.

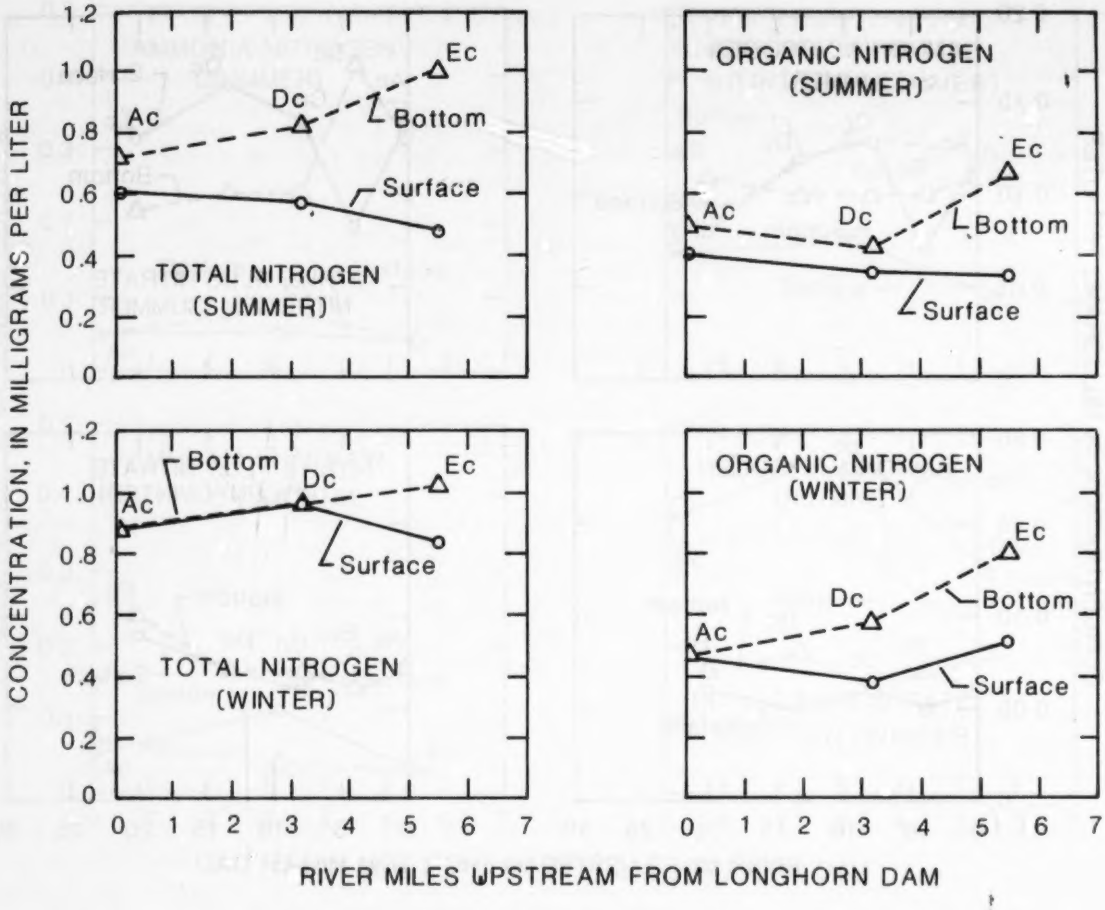

Figure 21.--Variations of average concentrations of total nitrogen and organic nitrogen during summer and winter surveys of Town Lake.

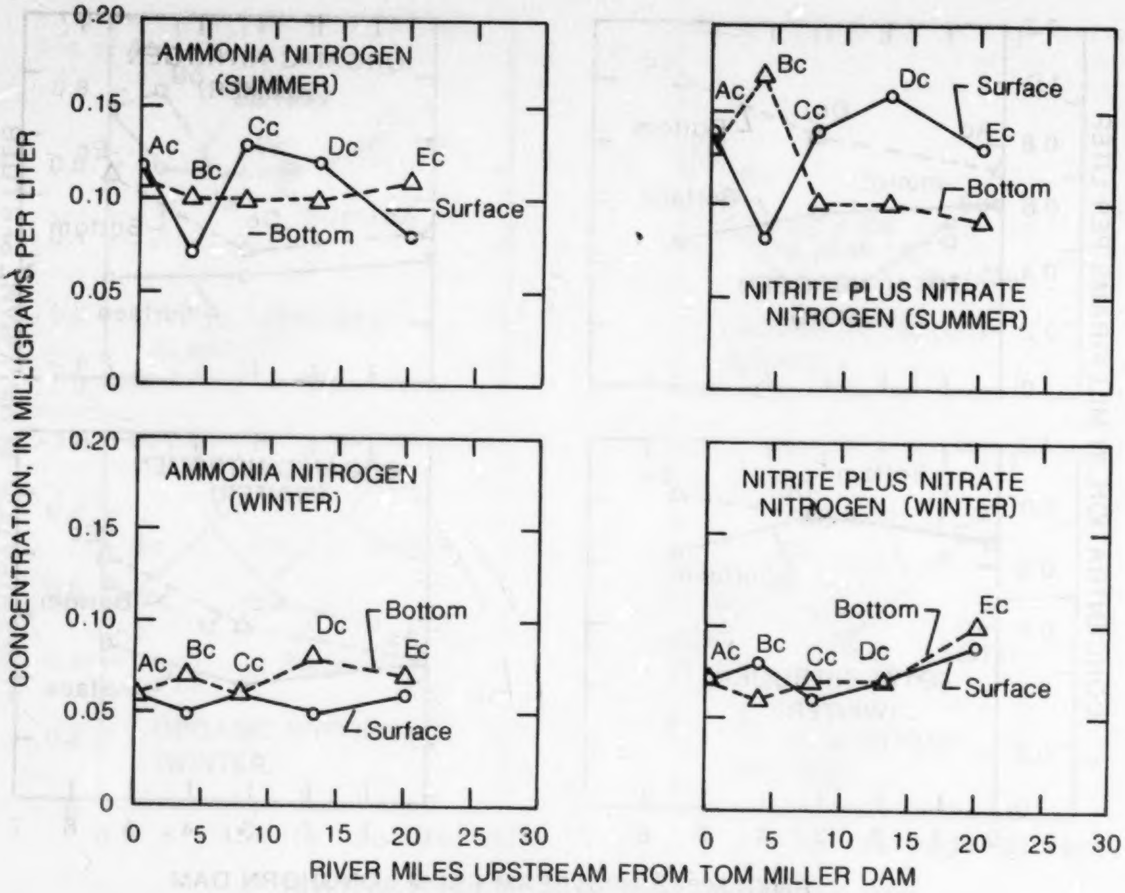

Figure 22.—Variations of average concentrations of ammonia nitrogen and nitrite plus nitrate nitrogen during summer and winter surveys of Lake Austin.

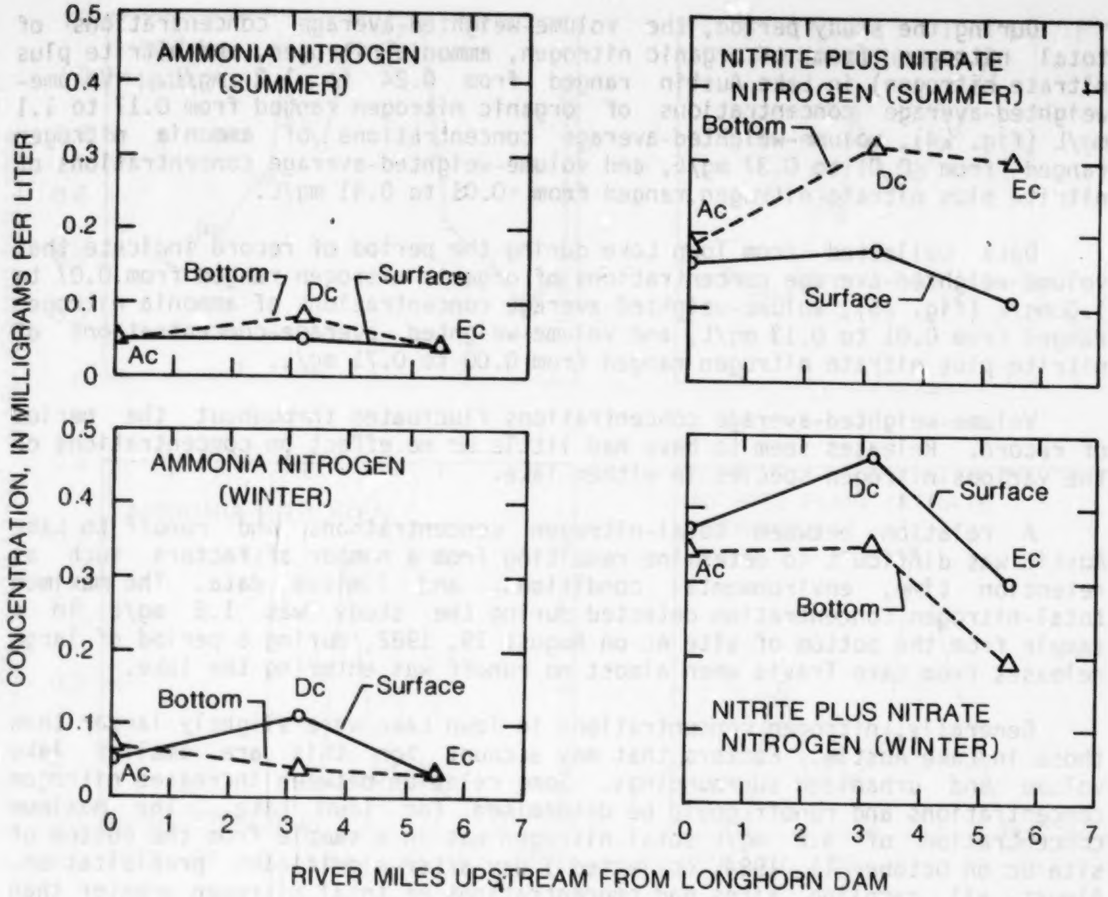

Figure 23.--Variations of average concentrations of ammonia nitrogen and nitrite plus nitrate nitrogen during summer and winter surveys of Town Lake.

During the study period, the volume-weighted-average concentrations of total nitrogen (sum of organic nitrogen, ammonia nitrogen, and nitrite plus nitrate nitrogen) in Lake Austin ranged from 0.24 to 1.2 mg/L. Volume-weighted-average concentrations of organic nitrogen ranged from 0.17 to 1.1 mg/L (fig. 24), volume-weighted-average concentrations of ammonia nitrogen ranged from <0.01 to 0.37 mg/L, and volume-weighted-average concentrations of nitrite plus nitrate nitrogen ranged from <0.01 to 0.41 mg/L.

Data collected from Town Lake during the period of record indicate that volume-weighted-average concentrations of organic nitrogen ranged from 0.07 to 1.0 mg/L (fig. 25), volume-weighted-average concentrations of ammonia nitrogen ranged from 0.01 to 0.13 mg/L, and volume-weighted average-concentrations of nitrite plus nitrate nitrogen ranged from 0.00 to 0.71 mg/L.

Volume-weighted-average concentrations fluctuated throughout the period of record. Releases seem to have had little or no effect on concentrations of the various nitrogen species in either lake.

A relation between total-nitrogen concentrations and runoff to Lake Austin was difficult to determine resulting from a number of factors such as retention time, environmental conditions, and limited data. The maximum total-nitrogen concentration detected during the study was 1.8 mg/L in a sample from the bottom of site Ac on August 19, 1982, during a period of large releases from Lake Travis when almost no runoff was entering the lake.

Generally, nitrogen concentrations in Town Lake were slightly larger than those in Lake Austin. Factors that may account for this are smaller lake volume and urbanized surroundings. Some relation between increased nitrogen concentrations and runoff could be determined for Town Lake. The maximum concentration of 3.2 mg/L total nitrogen was in a sample from the bottom of site Dc on October 11, 1984, collected 1 day after significant precipitation. Almost all sampling sites had concentrations of total nitrogen greater than 1.0 mg/L for that day. Data from several other surveys made after significant precipitation also indicated concentrations of total nitrogen greater than 1.0 mg/L.

Phosphorus

Phosphorus is contributed by many of the sources that contribute nitrogen. Phosphate fertilizers, some detergents, and domestic and industrial sewage effluents contain considerable quantities of phosphorus. Concentrations of phosphorus normally present in natural water generally are smaller than those of nitrogen. There are no drinking-water criteria for maximum concentrations of phosphorus in natural waters. However, concentrations of 0.01 to 0.3 mg/L (as P) have been known to promote eutrophication (U.S. Environmental Protection Agency, 1986a).

Analyses of samples from Lake Austin and Town Lake were for total phosphorus as phosphorus. The average summer concentration of total phosphorus throughout Lake Austin usually was less than 0.02 mg/L (fig. 26). The average summer concentration of total phosphorus for Town Lake was less than 0.03 mg/L except at Longhorn Dam, where it was 0.04 mg/L (fig. 27). During winter, average concentrations throughout Lake Austin and Town Lake

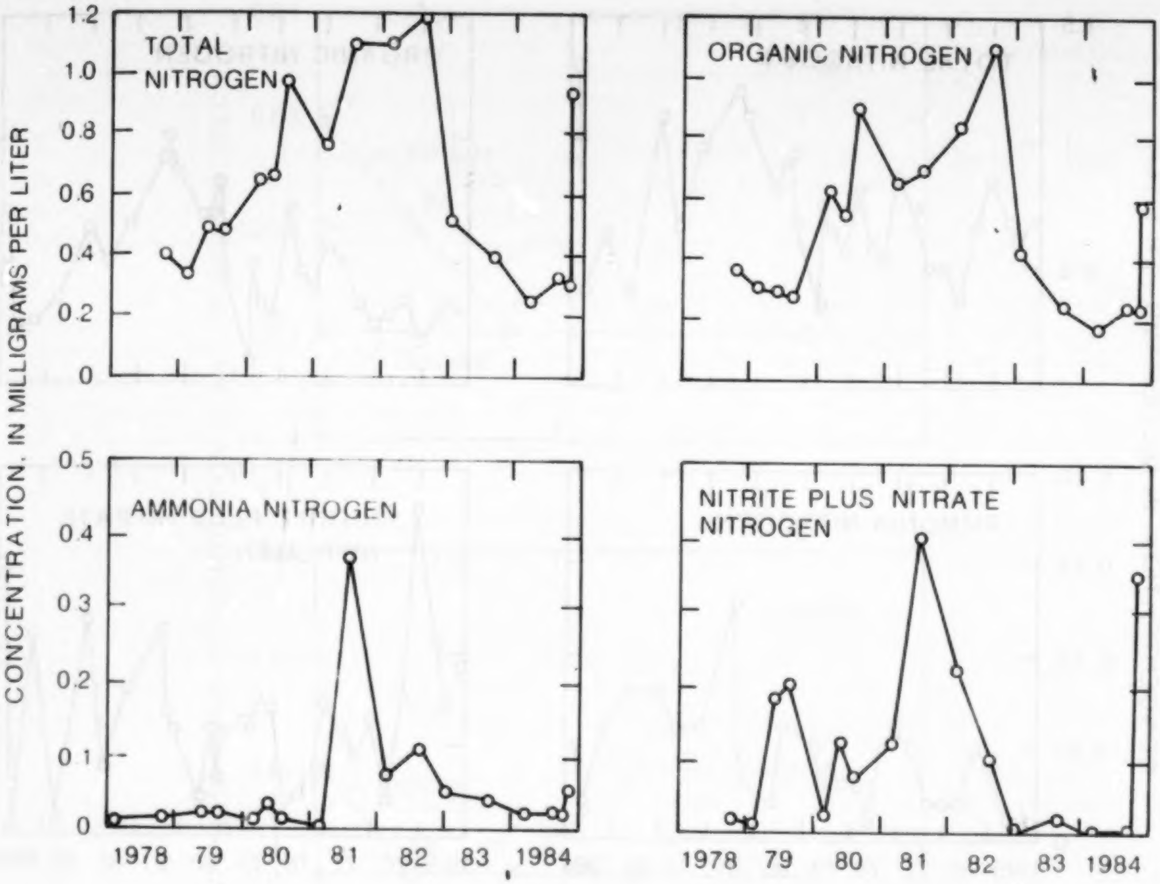

Figure 24.--Variations of volume-weighted-average concentrations of total nitrogen, organic nitrogen, ammonia nitrogen, and nitrite plus nitrate nitrogen in Lake Austin, October 1978-October 1984.

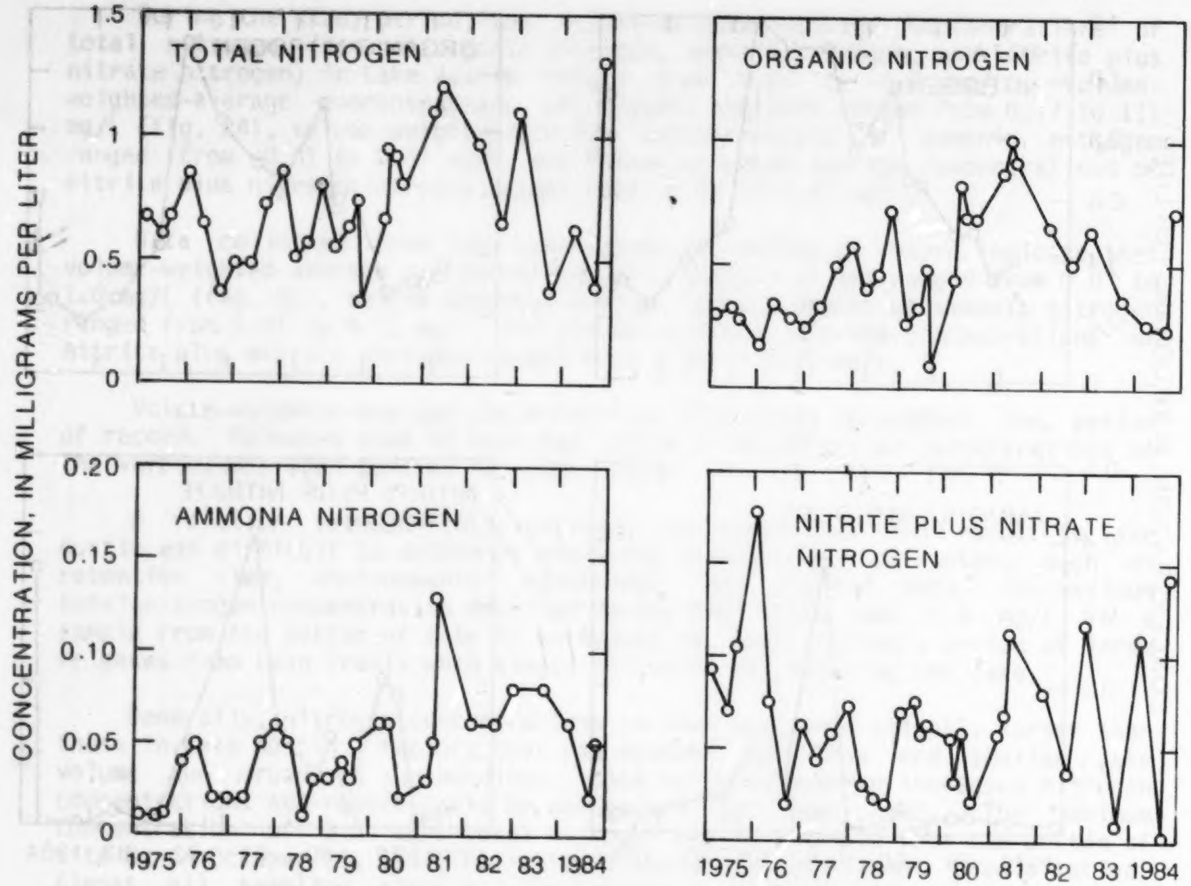

Figure 25.--Variations of volume-weighted-average concentrations of total nitrogen, organic nitrogen, ammonia nitrogen, and nitrite plus nitrate nitrogen in Town Lake, February 1975-October 1984.

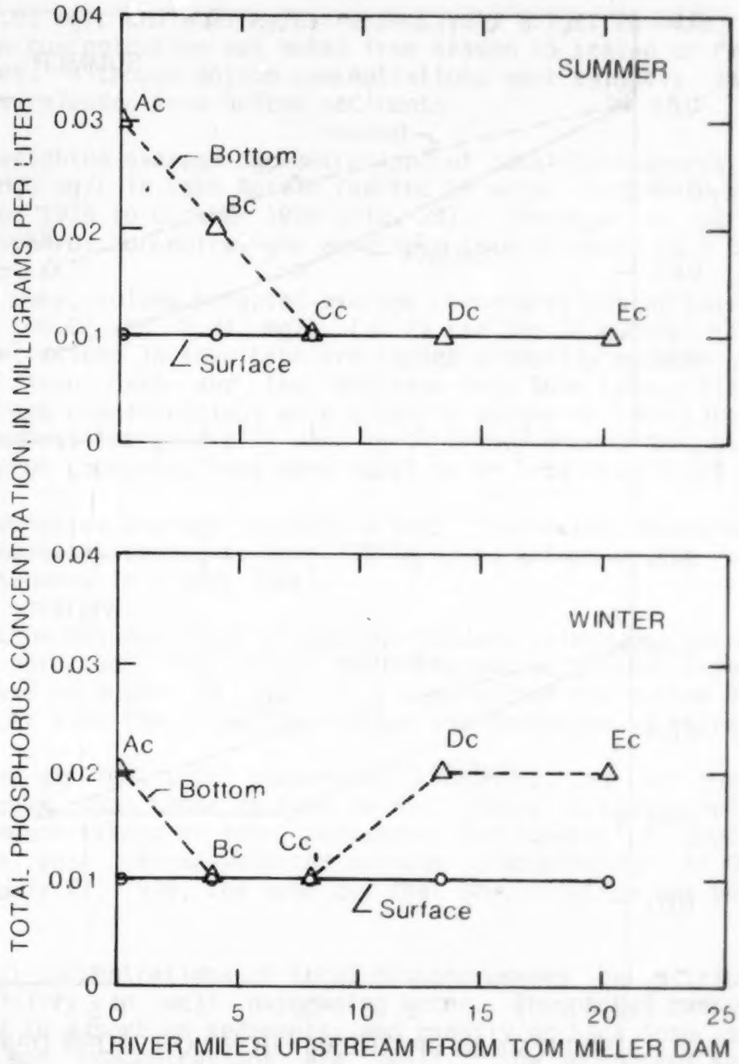

Figure 26.--Variations of average concentrations of total phosphorus during summer and winter surveys of Lake Austin.

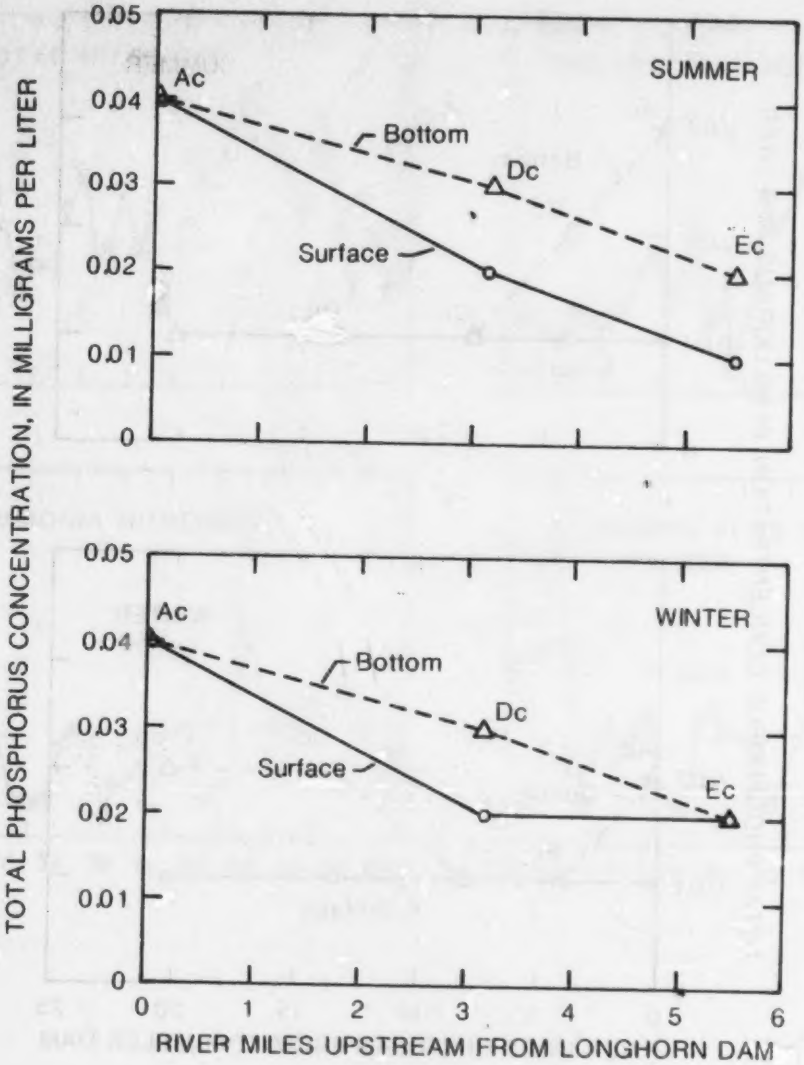

Figure 27.--Variations of average concentrations of total phosphorus during summer and winter surveys of Town Lake.

were about 0.01 mg/L and 0.03 mg/L, respectively (figs. 26 and 27). Little variation in concentration was noted from season to season or from the dam to the headwaters. Although bottom concentrations were slightly larger, little phosphorus is released from bottom sediments.

Volume-weighted-average concentrations of total phosphorus ranged from <0.01 to 0.030 mg/L in Lake Austin for the 17 water-quality surveys conducted during October 1978 to October 1984 (fig. 28). Ninety-five percent of the measured phosphorus concentrations were less than or equal to 0.030 mg/L.

In Town Lake, volume-weighted-average concentrations of total phosphorus ranged from <0.01 to 0.21 mg/L (as P) for the 32 surveys (fig. 29). The larger concentrations in Town Lake are caused primarily by more urbanized land adjacent to Town Lake and the drainage into Town Lake. Although volume-weighted-average concentrations were slightly larger in Town Lake than in Lake Austin, concentrations generally were low. Eighty-one percent of the measured total phosphorus concentrations were equal to or less than 0.030 mg/L.

Volume-weighted-average concentrations fluctuated throughout the period of record. Releases seemed to have little or no effect on the concentrations of total phosphorus in either lake.

No relation between total phosphorus concentrations and runoff in Lake Austin was detected. The largest total phosphorus concentration detected in Lake Austin was on August 19, 1982, in a sample from the bottom depth of 38 ft at site Ac. At that time, the lake system was dominated by releases.

As stated earlier, total phosphorus concentrations in Town Lake were slightly larger than those in Lake Austin. There is also a relation between increased concentrations of total phosphorus and runoff. A good example of this is the peak volume-weighted-average concentration of 0.21 mg/L that occurred on July 27, 1979, the same day that precipitation was between 4 and 4.5 in.

The small concentrations of total phosphorus may be attributed to its slight solubility in well oxygenated water. Phosphorus compounds are less soluble, tend to adsorb on sediments, and readily go back into solution when dissolved-oxygen concentrations are small. Low phosphorus solubilities in oxygen-rich water tend to keep concentrations at relatively small levels. The short retention time of water in the two lakes also has some bearing on small phosphorus concentrations during runoff. The data do not indicate a temporal trend of total phosphorus concentrations in Lake Austin or Town Lake.

Dissolved Solids, Chloride, Sulfate, and Hardness

Some of the more important constituents or properties that affect the utility of a reservoir as a water supply include dissolved solids, chloride, sulfate, and hardness. Because the concentrations of these constituents or properties and the specific conductance of a water are directly related, onsite measurements of specific conductance can be used to estimate concentrations of some constituents in a lake. During each lake survey, the specific conductance of water at each sampling site was determined at depth intervals of 5 to 10 ft. These data and results of analyses for dissolved

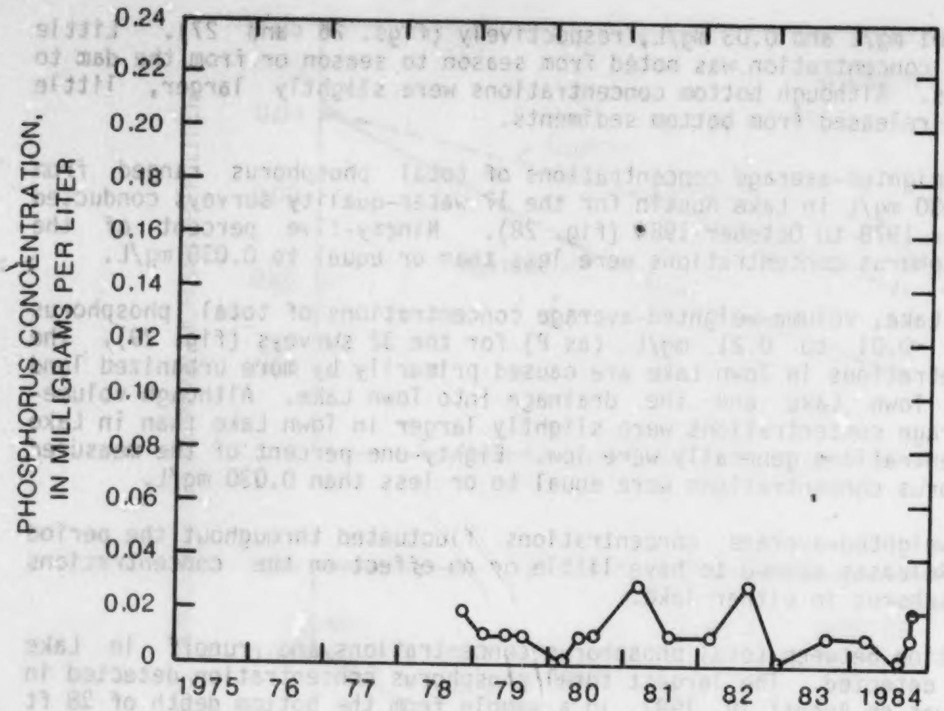

Figure 28.—Variations in volume-weighted-average concentrations of phosphorus in Lake Austin, October 1978–October 1984.

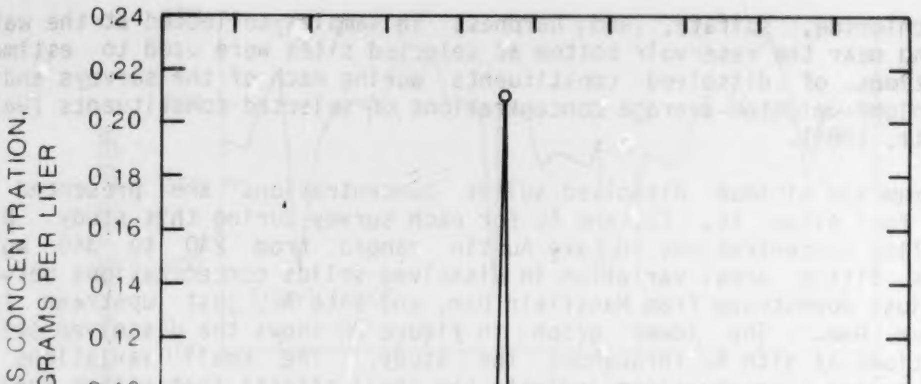

Figure 29.--Variations in volume-weighted-average concentrations of phosphorus in Town Lake, February 1975-October 1984.

solids, chloride, sulfate, and hardness in samples collected at the water surface and near the reservoir bottom at selected sites were used to estimate concentrations of dissolved constituents during each of the surveys and to compute volume-weighted-average concentrations of selected constituents (Wells and Schertz, 1984).

Maximum and minimum dissolved-solids concentrations are presented in table 4 for sites Ec, Cc, and Ac for each survey during this study. Dissolved-solids concentrations in Lake Austin ranged from 240 to 340 mg/L. There was little areal variation in dissolved-solids concentrations between site Ec, just downstream from Mansfield Dam, and site Ac, just upstream from Tom Miller Dam. The lower graph in figure 30 shows the dissolved-solids concentrations at site Ac throughout the study. The small variations in dissolved-solids concentrations indicate the small effects that either periods of large runoff or periods of large releases have on dissolved-solids concentrations in Lake Austin.

More variation in dissolved-solids concentration was detected in Town Lake than in Lake Austin. The larger variation in dissolved-solids concentrations in Town Lake was caused mainly by more storm runoff and smaller storage volume. Following storms, overland runoff usually contains smaller concentrations of dissolved chemical constituents than are present in the lake. Consequently, storm runoff usually will result in a decrease in dissolved-solids concentrations in the lake.

The maximum and minimum dissolved-solids concentrations for sites Ec, Cc, and Ac for each survey of Town Lake are shown in table 5. During the study period, dissolved-solids concentrations in Town Lake ranged from 170 to 360 mg/L.

During the study period, five water-quality surveys were conducted after moderate to heavy precipitation. These survey dates and precipitation data are summarized in the following table:

Date	Precipitation (inches)	Number of days since precipitation occurred
April 20, 1976	2.8 - 5.2	2
July 27, 1979	4 - 4.4	0
March 28, 1980	2.8 - 2.9	1
May 26, 1981	3 - 10	1
Oct. 11, 1984	0.6 - 5.2	1

Disregarding these surveys, dissolved-solids concentrations in Town Lake ranged from 240 to 360 mg/L, very similar to the range in Lake Austin. Generally, even during storm runoff, the water in Town Lake at site Ec, the inflow site, was of the same quality as that in Lake Austin. Most of the runoff into Town Lake comes from small watersheds that drain into Town Lake below site Ec. The top graph in figure 30 shows the concentration of dissolved solids at site Ac during the study and illustrates the effect of the five runoff periods on concentrations of dissolved solids.

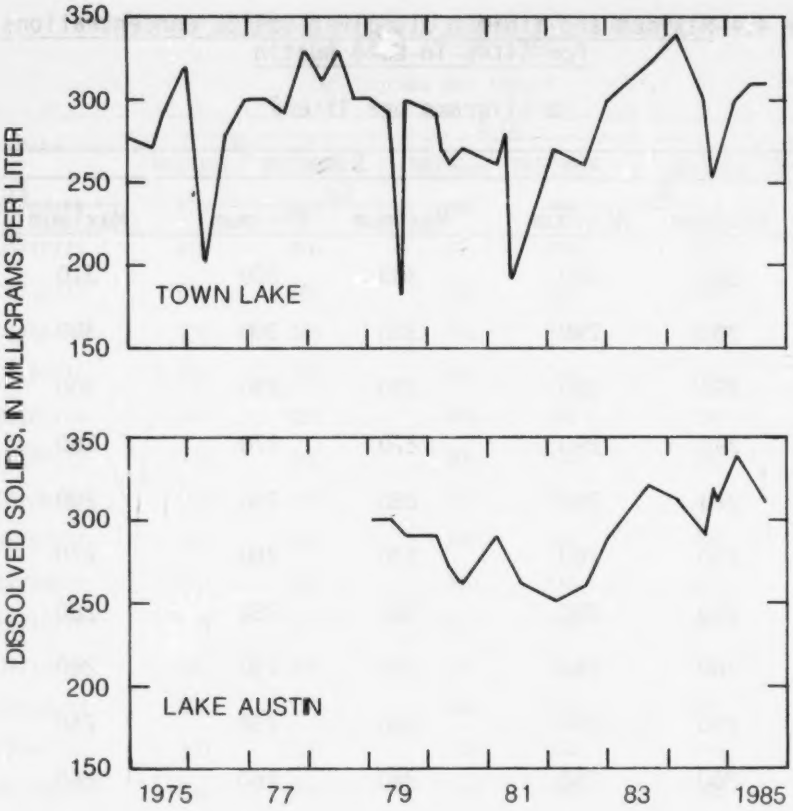

Figure 30.--Comparison of dissolved-solids concentrations at site Ac in Lake Austin and Town Lake.

Table 4.--Maximum and minimum dissolved-solids concentrations for sites in Lake Austin

[milligrams per liter]

Date	Site Ac		Site Cc		Site Ec	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
02/07/79	300	300	300	300	310	310
05/30/79	300	290	300	300	300	300
08/21/79	290	290	290	290	300	290
03/05/80	290	290	270	270	260	260
05/20/80	270	260	260	260	260	260
07/30/80	260	260	270	260	270	260
03/02/81	290	280	280	280	280	280
07/28/81	260	260	250	250	240	240
02/16/82	250	250	260	250	250	250
08/19/82	260	260	260	260	260	260
01/05/83	290	290	290	280	310	300
08/29/83	320	310	310	310	320	310
03/06/84	310	310	290	290	280	280
08/17/84	290	290	290	290	290	290
10/10/84	320	310	310	310	320	310
10/24/84	310	290	280	270	250	250
02/26/85	340	300	320	300	320	310
08/21/85	310	310	310	310	300	300

Table 5.--Maximum and minimum dissolved-solids concentrations for sites in Town Lake

[milligrams per liter]

Date	Site Ac Maximum	 Minimum	 Cc Maximum	 Minimum	 Ec Maximum	 Minimum
02/03/75	276	264	280	280	270	270
06/12/75	270	270	290	280	290	280
08/12/75	290	280	310	280	280	280
01/06/76	320	320	330	330	310	310
04/20/76	200	200	250	250	280	280
09/01/76	280	280	280	280	280	280
12/28/76	300	300	300	300	300	290
04/26/77	300	300	310	300	300	300
08/23/77	290	290	300	290	290	290
12/29/77	330	320	340	310	320	310
04/10/78	310	310	310	310	310	310
07/18/78	330	330	330	330	330	330
10/16/78	300	300	360	330	330	290
02/07/79	300	280	300	300	310	300
05/29/79	290	290	290	280	290	290
07/27/79	180	170	250	250	290	280
08/22/79	300	300	300	290	300	300
03/03/80	290	290	330	320	300	290
03/28/80	270	260	280	250	280	270
05/19/80	260	240	270	270	260	260
07/31/80	270	270	270	270	270	270
03/04/81	260	260	270	240	280	280
04/27/81	280	280	280	280	280	280
05/26/81	190	170	220	210	210	200
02/17/82	270	260	260	260	260	260
08/20/82	260	260	270	270	260	260
01/06/83	300	290	320	310	300	300
08/30/83	320	320	320	310	320	310
03/07/84	340	340	350	340	320	310
08/20/84	300	290	300	290	290	290
10/11/84	250	190	250	170	310	310
02/25/85	300	220	300	290	310	310
06/06/85	310	290	300	290	330	320
08/20/85	310	310	310	310	310	300

In Lake Austin, volume-weighted-average concentrations of dissolved solids range from 243 to 315 mg/L. Volume-weighted-average concentrations of dissolved chloride ranged from 36 to 71 mg/L, and volume-weighted-average concentrations of sulfate ranged from 25 to 46 mg/L. Water in Lake Austin may be classified as hard to very hard, with volume-weighted-average concentrations of hardness ranging from 174 to 205 mg/L. A plot of volume-weighted-average concentrations of dissolved solids, hardness, chloride, and sulfate throughout the study period, illustrating the variation in these four parameters, is shown in figure 31.

In Town Lake, the volume-weighted-average concentrations of dissolved solids ranged from 193 to 333 mg/L. The range in volume-weighted-average chloride concentrations was from 26 to 58 mg/L, and the range in volume-weighted-average sulfate concentrations was from 21 to 41 mg/L. The water in Town Lake may be classified as hard to very hard. Volume-weighted-average concentrations of hardness ranged from 144 to 234 mg/L. The volume-weighted-average concentrations of these four constituents during the period of record are shown in figure 32. The five surveys conducted following periods of large runoff detected decreases in all four constituents.

Little seasonal variation was noted in the volume-weighted-average concentrations of dissolved solids, chloride, and sulfate, or hardness. Again, this probably was caused by the short retention time in the lakes.

Monthly Loads of Dissolved Solids

During this study, the Geological Survey maintained periodic sampling at station 08154510 Colorado River below Mansfield Dam, the inflow site for Lake Austin (fig. 2). In addition, daily sampling for some constituents was maintained at station 08158000 Colorado River at Austin, the outflow site for Town Lake. From analysis of these samples, loads of dissolved solids entering Lake Austin and loads of dissolved solids leaving Town Lake could be estimated. Loads are a function of both concentration and discharge and may be computed using the formula:

$$\text{load} = 0.0027\,QC$$

where load is in tons per day;
Q is discharge, in cubic feet per second; and
C is concentration, in milligrams per liter.

A plot of dissolved-solids loads from the two stations is shown in figure 33. Generally, dissolved-solids loads at Mansfield Dam were less than those at the downstream site downstream from Town Lake. Three notable exceptions occurred in February of 1980, 1982, and 1984, which coincide with the lowering of water levels in Lake Austin.

In February of each even-numbered year, the city of Austin requests the LCRA to lower Lake Austin to the 480-ft level. This is accomplished by closing all gates at Mansfield Dam and opening gates at Tom Miller Dam until the desired water level is reached. There are three reasons for this action: (1) It allows property owners to repair or improve docks built at the edge of the lake; (2) it allows property owners to repair or improve water-intake systems; and (3) it allows the city of Austin to kill vegetation growing on

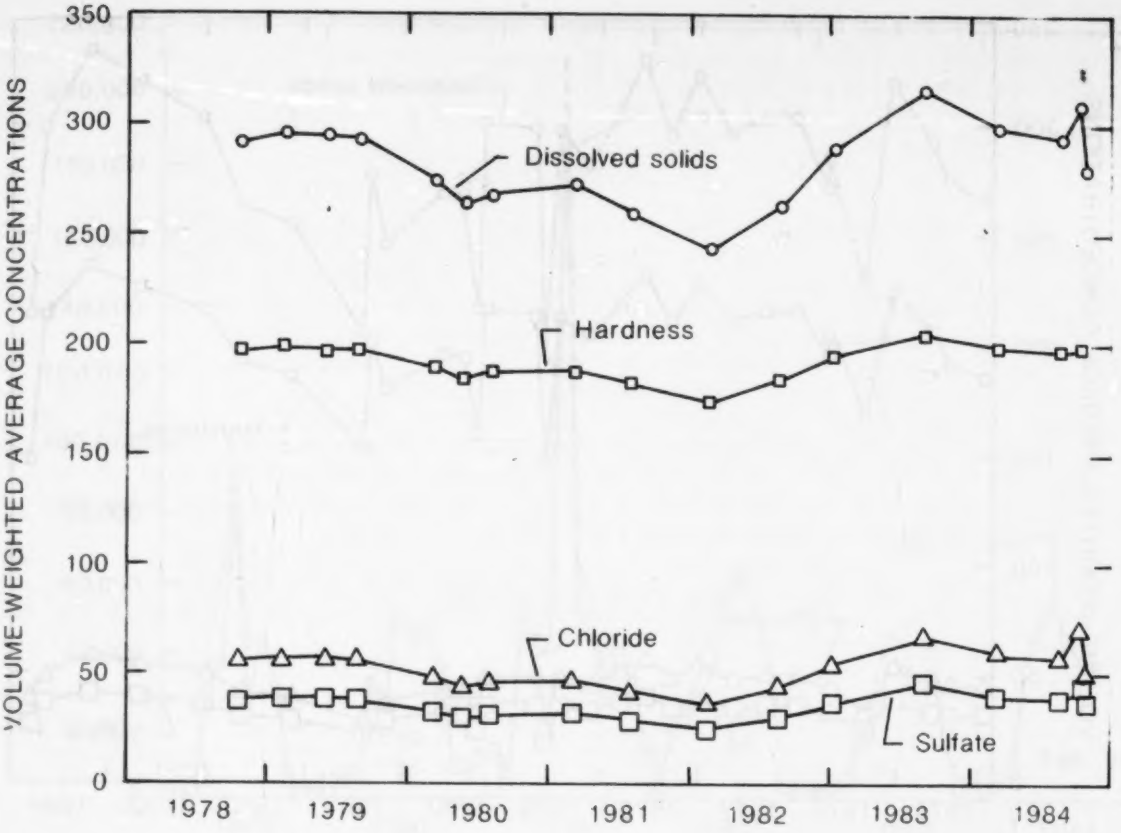

Figure 31.--Volume-weighted-average concentrations of dissolved solids, hardness, chloride, and sulfate in Lake Austin.

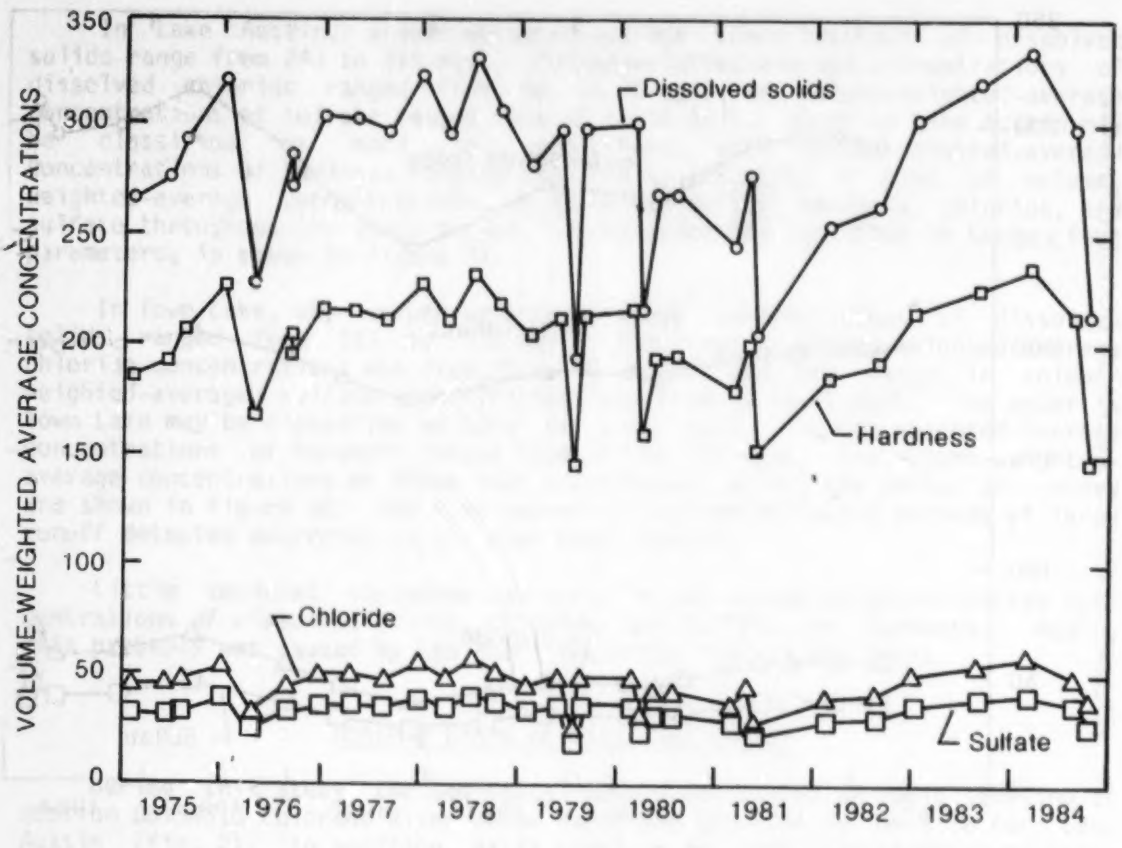

Figure 32.--Volume-weighted-average concentrations of dissolved solids, hardness, chloride, and sulfate in Town Lake.

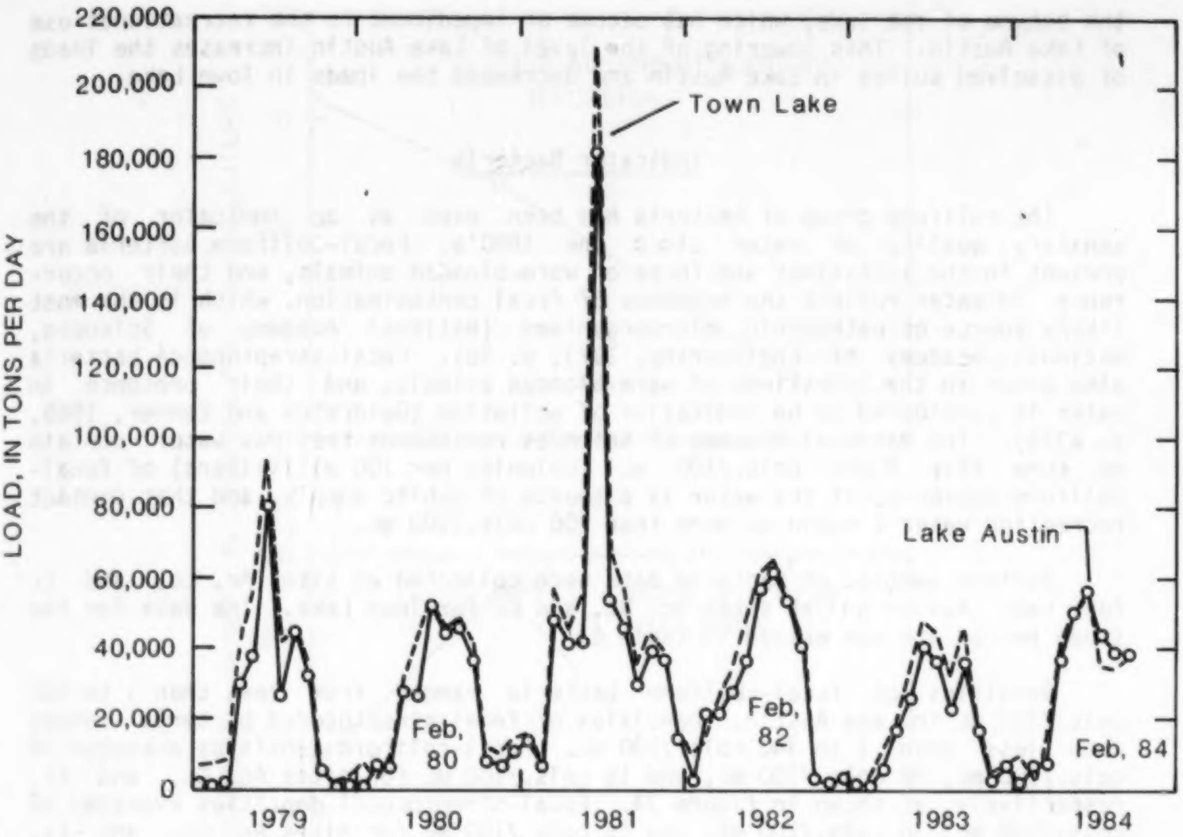

Figure 33.--Dissolved-solids loads in Lake Austin and Town Lake.

the bottom of the lake, which has become an impediment to the recreational use of Lake Austin. This lowering of the level of Lake Austin increases the loads of dissolved solids in Lake Austin and decreases the loads in Town Lake.

Indicator Bacteria

The coliform group of bacteria has been used as an indicator of the sanitary quality of water since the 1880's. Fecal-coliform bacteria are present in the intestines and feces of warm-blooded animals, and their occurrence in water reflect the presence of fecal contamination, which is the most likely source of pathogenic microorganisms (National Academy of Sciences, National Academy of Engineering, 1973, p. 58). Fecal-streptococci bacteria also occur in the intestines of warm-blooded animals, and their presence in water is considered to be indicative of pollution (Geldreich and Kenner, 1969, p. A348). The National Academy of Sciences recommends that raw water contain no more than 2,000 cols./100 mL (colonies per 100 milliliters) of fecal-coliform bacteria, if the water is a source of public supply, and that contact recreation water contain no more than 200 cols./100 mL.

Surface samples of bacteria data were collected at sites Ac, Cc, and Ec for Lake Austin and at sites Ac, Dc, and Ec for Town Lake. The data for the study period are summarized in table 6.

Densities of fecal-coliform bacteria ranged from less than 1 to 600 cols./100 mL in Lake Austin. Densities of fecal-streptococci bacteria ranged from less than 1 to 340 cols./100 mL. Fecal-coliform densities averaged 35 cols./100 mL, 56 cols./100 mL, and 19 cols./100 mL for sites Ac, Cc, and Ec, respectively, as shown in figure 34. Fecal-streptococci densities averaged 42 cols./100 mL, 34 cols./100 mL, and 16 cols./100 mL for sites Ac, Cc, and Ec, respectively. Largest densities were routinely detected at sites Ac and Cc. Site Ac is located in the most urbanized area of Lake Austin and this probably contributes to the larger densities. Larger densities at site Cc may be related to the fact that this site is adjacent to City Park, a local recreational facility. Smallest densities were detected at site Ec. This site is located in the headwaters of Lake Austin and receives large volumes of release water from Lake Travis, which may have resulted in the smaller values. Site Ec also is more remote and less disturbed than the two downstream sites.

In addition to areal variations, seasonal variations also were detected. Bacterial densities usually were larger during summer surveys than during winter surveys. The warmer water temperature may have contributed to this increase. This generally was true for each of the three sampling sites (table 7).

Densities of fecal-coliform bacteria in Town Lake ranged from 4 to 14,000 cols./100 mL; densities of fecal-streptococci bacteria ranged from less than 1 to 15,000 cols./100 mL. Fecal-coliform densities averaged 1,600 cols./100 mL, 1,200 cols./100 mL, and 140 cols./100 mL for sites Ac, Dc, and Ec, respectively, as shown in figure 35. Fecal-streptococci densities averaged 2,000 cols./100 mL, 1,300 cols./100 mL, and 440 cols./100 mL for sites Ac, Dc, and Ec, respectively (fig. 35). Largest densities of both bacteria were routinely detected in samples from sites Ac and Dc. Densities increased downstream with increased cumulative volumes of urban runoff. These sites periodically

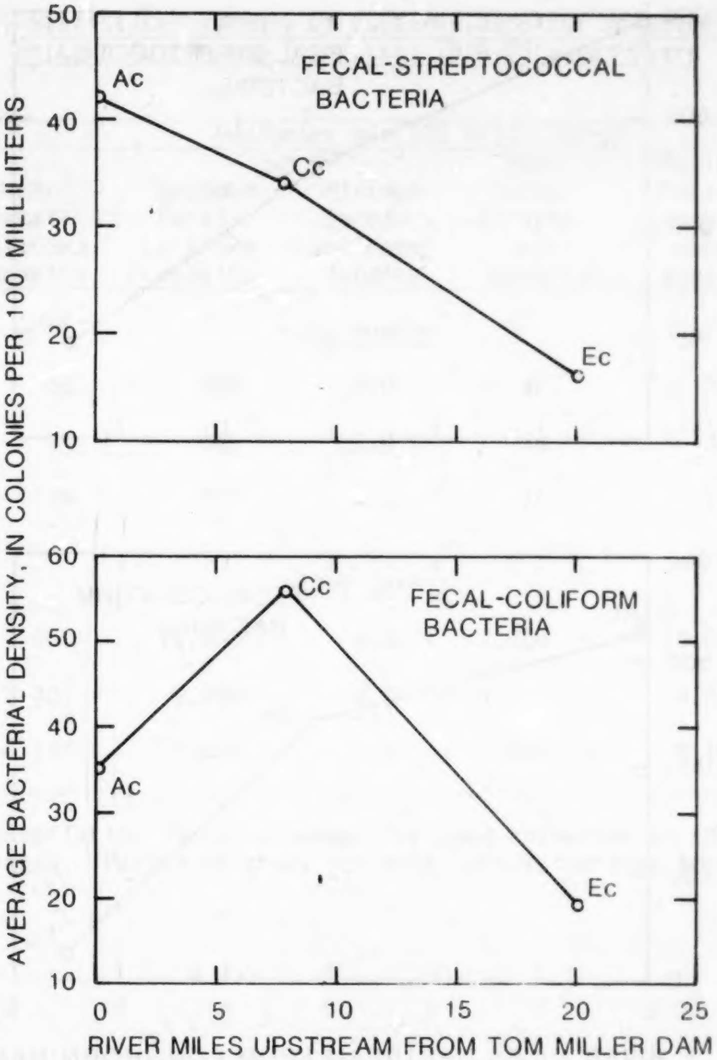

Figure 34.--Average bacterial densities in Lake Austin.

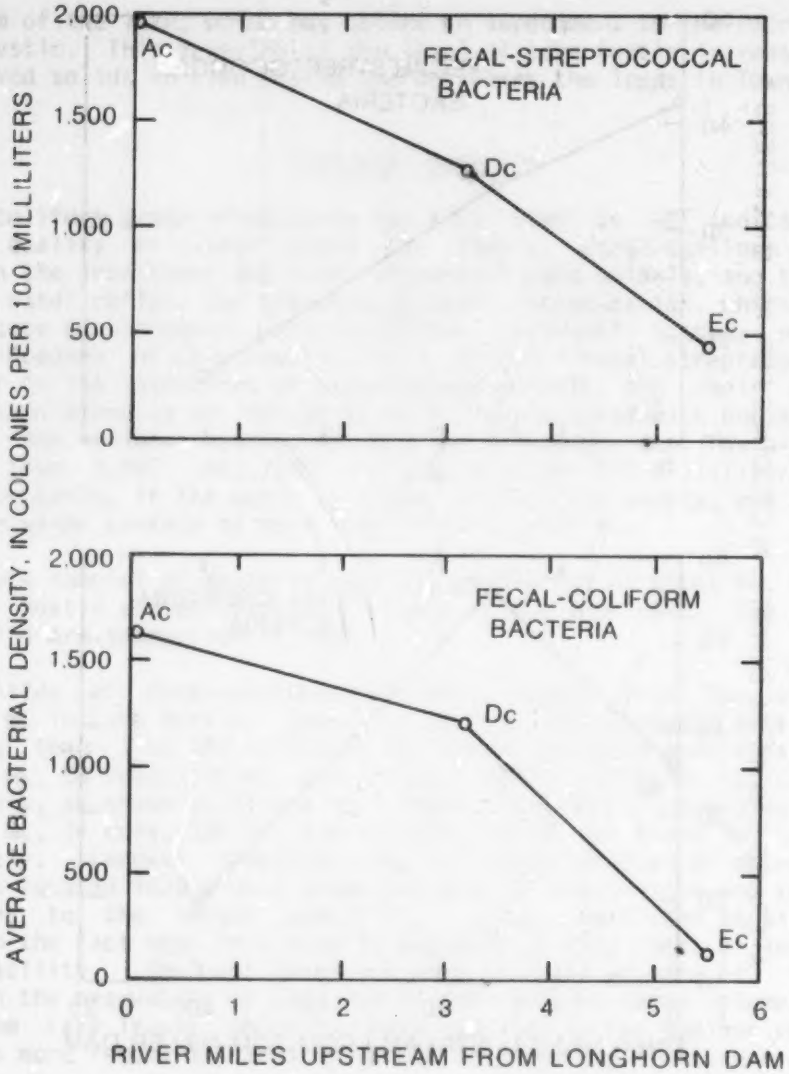

Figure 35.--Average bacterial densities in Town Lake.

Table 6.--Statistical summary of bacteria data for selected stations on Lake Austin and Town Lake, 1978-85 water years

	(colonies per 100 milliliters)					
Station	Mean fecal-coliform density	Maximum fecal-coliform density	Minimum fecal-coliform density	Mean fecal-strepto-cocci density	Maximum fecal-strepto-cocci density	Minimum fecal-strepto-cocci density
			Lake Austin			
Ac	35	180	4.0	42	340	1.0
Cc	56	600	1.0	34	310	1.0
Ec	19	200	1.0	16	190	1.0
			Town Lake			
Ac	1,600	14,000	6.0	2,000	15,000	1.0
Dc	1,200	9,900	9.0	1,300	8,800	1.0
Ec	140	1,600	4.0	440	8,100	1.0

NOTE: Data compilation is not a summary of data collected on the same day for both lakes. Period of study for each lake is defined in the text.

Table 7.--Summary of bacteria data for Lake Austin

[cols./100 mL, colonies per 100 milliliters; <, less than]

Date	Site Ac fecal coliform/ fecal streptococci densities (cols./100 mL)	Ratio	Site Cc fecal coliform/ fecal streptococci densities (cols./100 mL)	Ratio	Site Ec fecal coliform/ fecal streptococci densities (cols./100 mL)	Ratio
10/17/78	4/1	4	3/<1	--	1/<1	--
02/07/79 1/	6/12	.5	3/22	0.1	2/6	0.3
05/30/79 2/	9/1	9	9/1	9	2/<1	--
08/21/79 2/	--	--	--	--	--	--
03/05/80	12/17	.7	4/9	.4	3/2	1.5
05/20/80	6/1	6	4/1	4	2/1	2
07/30/80 2/	47/4	11	27/6	4.5	<1/<1	--
03/02/81	88/130	.7	1/5	.2	18/<1	--
07/28/81 2/	10/7	1.4	140/20	7	1/3	.3
02/16/82 2/	9/31	.3	3/18	.2	3/1	3
08/19/82 2/	6/16	.4	5/39	.1	4/8	.5
01/05/83	5/23	.2	1/<1	--	3/<1	--
08/29/83 2/	30/28	1.0	21/79	.3	1/5	.2
03/06/84	18/45	.4	10/23	.4	6/34	.2
08/17/84 2/	46/4	12	60/9	6.7	51/1	51
10/10/84 1/	180/23	8	18/6	3.0	9/12	.8
10/24/84 1/	92/340	.3	600/310	1.9	200/190	1.1

1/ Samples collected during significant runoff.
2/ Samples collected during inflow from Lake Travis.

NOTE: Inflow data for all samples presented in table 2.

receive substantial quantities of urban drainage. Smallest densities were detected in samples from site Ec. The smaller values at Ec result from its location in the headwaters where it receives large volumes of inflow water from Lake Austin.

Bacteria data for Town Lake also exhibited seasonal variation. In most instances, bacterial densities usually were larger during summer surveys than during winter surveys. This generally was true for each of the three sampling sites (table 8).

Stormwater runoff potentially can cause significant variations in the water quality of a lake or reservoir. This generally is most evident with indicator bacteria. Selected surveys of Lake Austin and Town Lake have been analyzed during periods of no release/little runoff, release/little runoff, and runoff (figs. 36-37). Fecal-coliform and fecal-streptococci densities were determined during each of these periods. Lake Austin had the largest bacterial densities during periods following runoff; however, these densities were only slightly larger than during other surveys. For Town Lake, bacterial densities of fecal coliform and fecal streptococci were substantially larger following runoff. Town Lake receives more runoff from urbanized areas than does Lake Austin and has less capacity for dilution. During and following runoff and on other occasions, water in Town Lake exceeded the National Academy of Science (1973) recommendation of 2,000 cols./100 mL fecal coliform for public supply and 200 cols./100 mL for contact recreation water. Most of the time, however, water in Lake Austin was within these guidelines.

It is important to know whether fecal-coliform bacteria originated from human or animal sources in order to identify the sources of contamination. An aid in making this determination is the ratio of fecal coliform/fecal streptococci (Geldreich and Kenner, 1969). A ratio larger than 4 indicates mostly human sources. A ratio of less than 1 indicates mostly animal sources. Many point sources of mixtures of both animal and human waste can occur and usually result in a fecal coliform/fecal streptococci ratio ranging from about 1 to 2. These ratios are not valid if time of entry of the bacteria into the lake is more than 24 hours prior to sampling because of different attrition rates for the bacteria. Also, the ratio should be interpreted with caution if the fecal-coliform or fecal-streptococci densities are less than 100 col./100 ml.

The fecal-coliform/fecal-streptococci data indicated that the major sources of bacteria fluctuated between human and animal sources for Lake Austin and Town Lake during the study (fig. 38). There also were variations from site to site on each lake, and ratios were smallest during runoff. Except for runoff, variations may be explained by the changing land-use patterns throughout each lake basin.

Effects of Stormwater Runoff on Water Quality in Lake Austin and Town Lake

Of the 17 water-quality surveys conducted on Lake Austin, 4 surveys were classified as being influenced by stormwater runoff; of the 32 surveys conducted on Town Lake, 5 were classified as being influenced by stormwater runoff. Water-quality surveys following storm events generally were conducted within 1 or 2 days following the storms. Analysis of data collected during

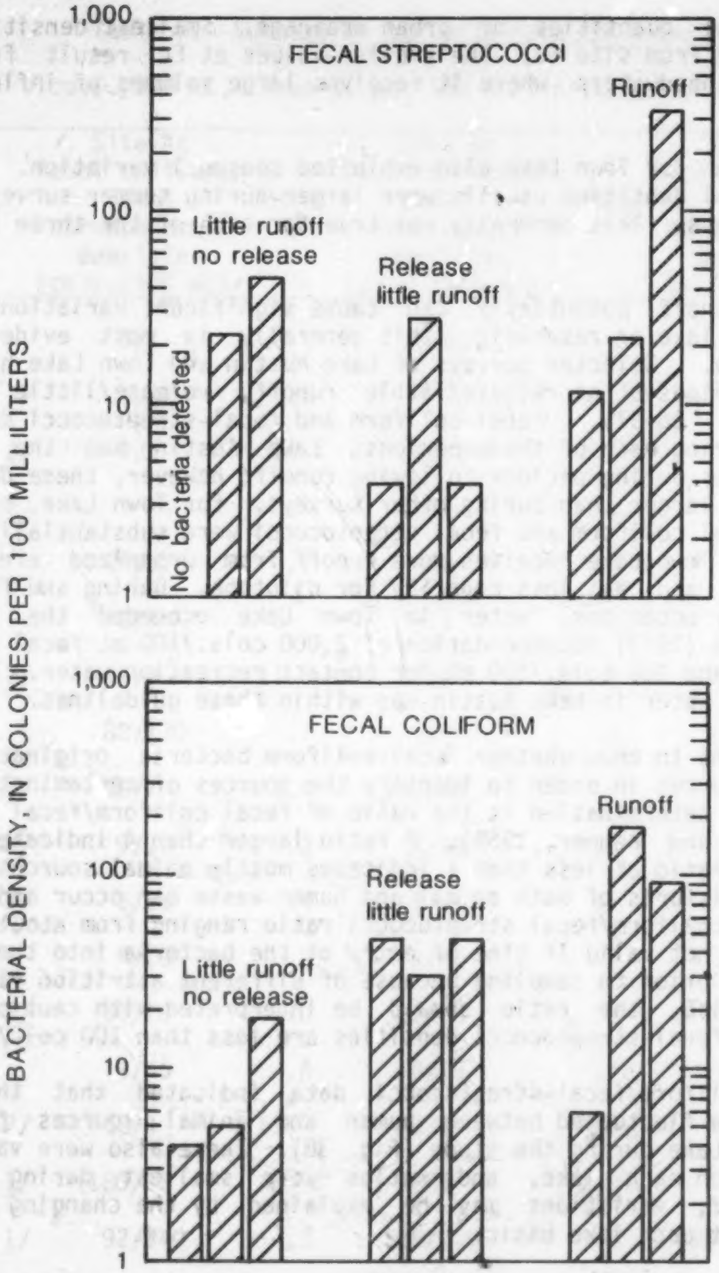

Figure 36.--Bacterial densities during periods of release and/or runoff to Lake Austin site Ac.

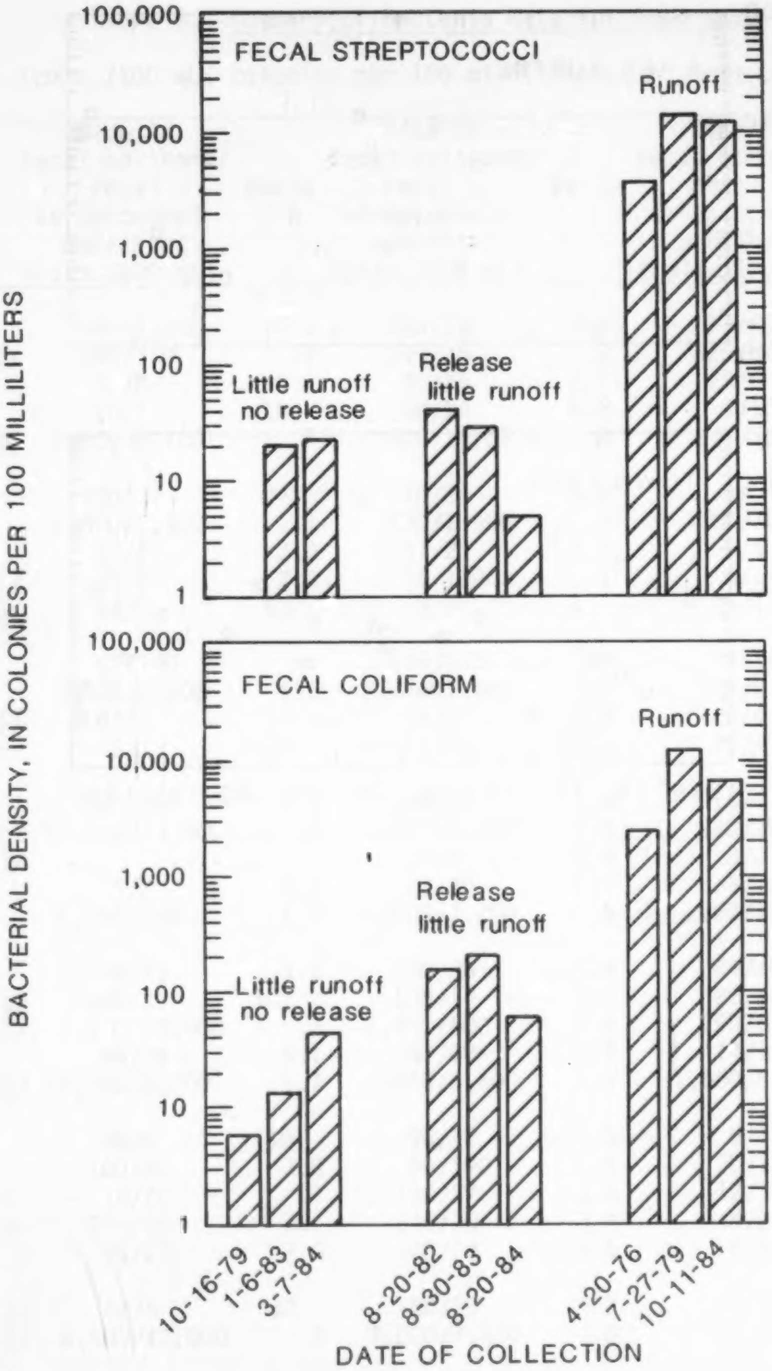

Figure 37.--Bacterial densities during periods of release and/or runoff to Town Lake site Ac.

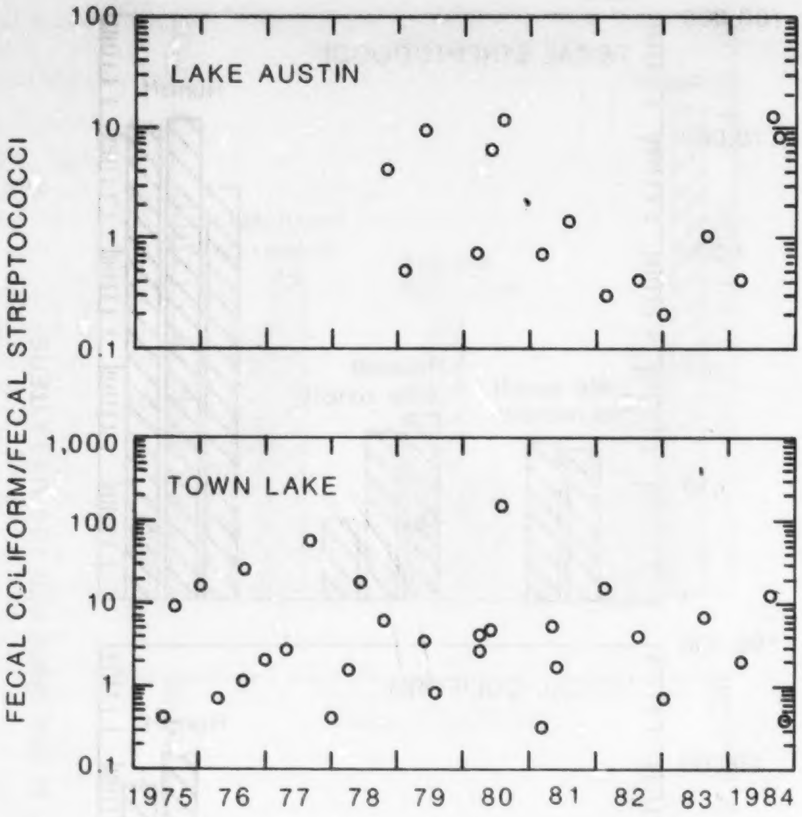

Figure 38.--Fecal-coliform/fecal-streptococci ratios for Lake Austin and Town Lake.

Table 8.--Summary of bacteria data for Town Lake

[cols./100 mL, colonies per 100 milliliters; <, less than]

Date	Site Ac fecal coliform/ fecal streptococci densities (cols./100 mL)	Ratio	Site Cc fecal coliform/ fecal streptococci densities (cols./100 mL)	Ratio	Site Ec fecal coliform/ fecal streptococci densities (cols./100 mL)	Ratio
02/03/75	460/1,500	0.3	120/100	1.2	170/60	2.8
06/12/75 1/	290/700	.4	140/260	.5	320/84	3.8
08/12/75	72/8	9	69/26	2.7	28/6	4.6
01/06/76	16/1	16	88/14	6.2	9/10	.9
04/20/76 2/	2,500/3,700	.7	960/1,200	.8	240/560	.4
09/01/76	520/22	24	10/8	1.2	8/14	.6
09/02/76	2,800/2,500	1.1	680/1,600	.4	7/30	.2
12/28/76	12/6	2.0	57/21	2.7	6/5	1.2
04/26/77 1/	16/6	2.6	16/180	.1	6/14	.4
08/23/77 1/	53/1	53	9/9	1	7/12	.6
12/29/77	52/140	.4	540/940	.6	9/160	.1
04/10/78	3,800/2,600	1.5	2,800/1,600	1.8	280/330	.1
06/18/78 1/	84/5	17	38/4	9.5	4/4	1
10/16/78	6/1	6	31/1	31	20/<1	--
05/29/79	180/55	3.3	140/79	1.8	16/7	2.3
07/27/79 2/	12,000/15,000	.8	9,900/8,800	1.1	680/180	3.8
08/22/79 1/	--	--	37/5	7.4	8/3	2.7
03/30/80	8/2	4.0	82/49	1.7	6/12	.5
03/28/80	2,000/780	2.5	4,600/7,200	.6	220/230	1.0
05/19/80	200/43	4.6	140/36	3.9	44/10	4.4
07/31/80 1/	440/3	147	100/14	7.1	28/4	7.0
03/04/81 2/	3,700/12,000	.3	2,400/500	4.8	290/640	.5
04/27/81	96/19	5.1	57/18	3.2	14/14	1
05/26/81 2/	14,000/8,300	1.7	7,800/5,600	1.4	1,600/8,100	.2
02/17/82	86/6	15	96/22	4.3	6/15	.4
08/20/82	160/42	3.8	80/190	.4	30/120	.2
01/06/83	14/20	.7	110/37	3.0	12/13	.9
08/20/83 1/	210/30	7	240/70	3.4	14/240	.1
03/07/84	45/23	2.0	260/74	3.5	6/62	.1
08/20/84 1/	62/5	12	80/19	4.2	39/80	.5
10/11/84 2/	6,500/13,000	.5	7,000/7,100	1.0	620/3,000	.2

1/ Samples collected during inflow from Lake Austin.
2/ Samples collected during significant runoff.
NOTE: Inflow data for all samples presented in table 3.

these surveys indicated that for most properties and constituents, the water quality in Lake Austin and Town Lake was not impacted adversely by stormwater runoff.

Little or no impact of stormwater runoff could be detected for temperature, dissolved oxygen, or trace elements in either Lake Austin or Town Lake. Increased concentrations of nitrogen and phosphorus were detected in Town Lake, but not in Lake Austin following runoff. Concentrations of total nitrogen often exceeded 1.0 mg/L in Town Lake following runoff, and the largest concentration of total phosphorus detected in Town Lake occurred following 4 in of precipitation. A decrease in concentrations of dissolved solids and major ions occurred in Town Lake following runoff. Similar decreases in dissolved solids and major ions were not detected in Lake Austin. Densi- ties of fecal-coliform and fecal-streptococci bacteria were larger in Lake Austin and Town Lake following runoff. Densities of both indicator bacteria increased more in Town Lake than in Lake Austin.

There are two primary reasons why more adverse impacts have not been detected in the two lakes:

(1) The average retention time in Town Lake is less than 3 days, and during April through August, the average retention time is less than 0.5 day. It is likely that much of the stormwater entering Town Lake from various tributaries had passed through the lake by the time water-quality surveys were conducted. Although the retention time in Lake Austin is considerably longer than in Town Lake, much of the storm water entering Lake Austin comes from Bull Creek which enters Lake Austin about 5 mi upstream from Tom Miller Dam. Consequently, much of the stormwater entering Lake Austin has a considerably shorter retention time than that indicated in figure 7. Much of the storm water entering Lake Austin from Bull Creek may have passed through Tom Miller Dam at the time of the water-quality surveys.

(2) Not all areas of the lakes were sampled. Fixed-station monitoring limits the ability to perform fully comprehensive surveys to determine the impact of stormwater runoff. During more than one water-quality survey following storm runoff, areas of turbid water not at the fixed-sampling locations were observed in Lake Austin and Town Lake. Consequently, some areas of the lakes that probably were affected by storm runoff were not sampled.

Suitability of Water as a Public Supply

The suitability of water for public supply depends to a large extent on the concentrations of chemical constituents that may have a significant impact on the health of the consumer and to a lesser extent on the concentrations of constituents that may affect the aesthetic qualities and discourage use of the water by the public. The source and significance of selected constituents and properties commonly reported in water analyses are presented in table 9, and a summary of regulations for selected constituents is presented in table 10. A comparison of these regulations with data in tables 11-59 (Supplemental Information) indicates that the concentrations of most chemical constituents in the waters of Lake Austin and Town Lake are smaller than the maximum contaminant level or secondary contaminant level set by the U.S. Environmental Protection Agency (1986b,c). However, at site Ac for both lakes, the concentrations of

Table 9.--Source and significance of selected constituents and properties commonly reported in water analyses 1/

[mg/L, milligrams per liter; µg/L, micrograms per liter; µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius]

Constituent or property	Source or cause	Significance
Silica (SiO_2)	Silicon ranks second only to oxygen in abundance in the Earth's crust. Contact of natural water with silica-bearing rocks and soils usually results in a concentration range of about 1 to 30 mg/L, but concentrations as large as 100 mg/L are common in water in some areas.	Although silica in some domestic and industrial water supplies may inhibit corrosion of iron pipes by forming protective coatings, silica generally is objectionable in industrial supplies, particularly in boiler feedwater, because it may form hard scale in boilers and pipes or deposit in the tubes of heaters and on steam-turbine blades.
Iron (Fe)	Iron is an abundant and widespread constituent of many rocks and soils. Iron concentrations in natural water are dependent on several chemical equilibria processes including oxidation and reduction; precipitation and solution of hydroxides, carbonates, and sulfides; complex formation, especially with organic material; and the metabolism of plants and animals. Dissolved-iron concentrations in oxygenated surface water seldom are as large as 1 mg/L. Some ground water, unoxygenated surface water such as deep water of stratified lakes and reservoirs, and acidic water resulting from discharge of industrial wastes or drainage from mines may contain considerably more iron. Corrosion of iron casings, pumps, and pipes may add iron to water pumped from wells.	Iron is an objectionable constituent in water supplies for domestic use because it may adversely affect the taste of water and beverages and stain laundered clothes and plumbing fixtures. The secondary maximum contamination level of iron for public water systems is 300 µg/L (U.S. Environmental Protection Agency, 1986c). Iron also is undesirable in some industrial water supplies, particularly in water used in high-pressure boilers and those used for food processing, production of paper and chemicals, and bleaching or dyeing of textiles.
Calcium (Ca)	Calcium is widely distributed in the common minerals of rocks and soils and is the principal cation in natural freshwater, especially water that contacts deposits or soils originating from limestone, dolomite, gypsum, and gypsiferous shale. Calcium concentrations in freshwater usually range from zero to several hundred milligrams per liter. Larger concentrations are not uncommon in water in arid regions, especially in areas where some of the more soluble rock types are present.	Calcium contributes to the total hardness of water. Small concentrations of calcium carbonate combat corrosion of matallic pipes by forming protective coatings. Calcium in domestic water supplies is objectionable because it tends to cause incrustations on cooking utensils and water heaters and increases soap or detergent consumption in water used for washing, bathing, and laundering. Calcium also is undesirable in some industrial water supplies, particularly in water used by electroplating, textile, pulp and paper, and brewing industries and in water used in high-pressure boilers.

Table 9.--Source and significance of selected constituents and properties commonly reported in water analyses 1/--Continued

Constituent or property	Source or cause	Significance
Magnesium (Mg)	Magnesium ranks eighth among the elements in order of abundance in the Earth's crust and is a common constituent in natural water. Ferromagnesian minerals in igneous rock and magnesium carbonate in carbonate rocks are two of the more important sources of magnesium in natural water. Magnesium concentrations in freshwater usually range from zero to several hundred milligrams per liter; but larger concentrations are common in water associated with limestone or dolomite.	Magnesium contributes to the total hardness of water. Large concentrations of magnesium are objectionable in domestic water supplies because they can exert a cathartic and diuretic action upon unacclimated users and increase soap or detergent consumption in water used for washing, bathing, and laundering. Magnesium also is undesirable in some industrial supplies, particularly in water used by textile, pulp and paper, and brewing industries and in water used in high-pressure boilers.
Sodium (Na)	Sodium is an abundant and widespread constituent of many soils and rocks and is the principal cation in natural water associated with argillaceous sediments, marine shales, and evaporites and in sea water. Sodium salts are very soluble and once in solution tend to stay in solution. Sodium concentrations in natural water vary from less than 1 mg/L in stream runoff from areas of high rainfall quantities to more than 100,000 mg/L in ground and surface water associated with halite deposits in arid areas. In addition to natural sources of sodium, sewage, industrial effluents, oilfield brines, and deicing salts may contribute sodium to surface and groung water.	Sodium in drinking water may impart a salty taste and may be harmful to persons suffering from cardiac, renal, and circulatory diseases and to women with toximia of pregnancy. Sodium is objectionable in boiler feedwater because it may cause foaming. Large sodium concentrations are toxic to most plants; and a large ratio of sodium to total cations in irrigation water may decrease the permeability of the soil, increase the pH of the soil solution, and impair drainage.
Potassium (K)	Although patassium is only slightly less common than sodium in igneous rocks and is more abundant in sedimentary rocks, the concentration of potassium in most natural water is much smaller than the concentration of sodium. Potassium is not as easily liberated from silicate minerals as sodium and is more easily adsorbed by clay minerals and reincorporated into solid weathering products. Concentrations of potassium more than 20 mg/L are unusual in natural freshwater, but much larger concentrations are not uncommon in brines or in water from hot springs.	Large concentrations of potassium in drinking water may impart a salty taste and act as a cathartic, but the range of potassium concentrations in most domestic supplies seldom causes these problems. Potassium is objectionable in boiler feedwaters because it may cause foaming. In irrigation water, potassium and sodium act similarly upon the soil, although potassium generally is considered less harmful than sodium.

Table 9.--Source and significance of selected constituents and properties commonly reported in water analyses 1/--Continued

Constituent or property	Source or cause	Significance
Alkalinity	Alkalinity is a measure of the capacity of water to neutralize a strong acid, usually to pH of 4.5, and is expressed in terms of an equivalent concentration of calcium carbonate ($CaCO_3$). Alkalinity in natural water usually is caused by the presence of bicarbonate and carbonate ions and to a lesser extent by hydroxide and trace acid radicals such as borates, phosphates, and silicates. Carbonate and bicarbonate are common to most natural water because of the abundance of carbon dioxide and carbonate minerals in nature. Direct contribution to alkalinity in natural water by hydroxide is rare and usually can be attributed to contamination. The alkalinity of natural water varies greatly but rarely exceeds 400 to 500 mg/L as $CaCO_3$.	Alkaline water may have a distinctive unpleasant taste. Alkalinity is detrimental in several industrial processes, especially those involving the production of food and carbonated or acid-friut beverages. The alkalinity in irrigation water in excess of alkaline earth concentration may increase the pH of the soil solution, leach organic material and decrease permeability of the soil, and impair plant growth.
Sulfate (SO_4)	Sulfur is a minor constituent of the Earth's crust but is widely distributed as metallic sulfides in igneous and sedimentary rocks. Weathering of metallic sulfides such as pyrite by oxygenated water yields sulfate ions to the water. Sulfate is dissolved also from soils and evaporite sediments containing gypsum or anhydrite. The sulfate concentration in natural freshwater may range from zero to several thousand milligrams per liter. Drainage from mines may add sulfate to waters by virtue of pyrite oxidation.	Sulfate in drinking water may impart a bitter taste and act as a laxative on unacclimated users. The secondary maximum contaminant level of sulfate for public water systems is 250 mg/L (U.S. Environmental Protection Agency, 1986c). Sulfate also is undesirable in some industrial supplies, particularly in water used for the production of concrete, ice, sugar, and carbonated beverages and in water used in high-pressure boilers.
Chloride (Cl)	Chloride is relatively scarce in the Earth's crust but is the predominant anion in sea water, most petroleum-associated brines, and in natural freshwater, particularly water associated with marine shales and evaporites. Chloride salts are very soluble and once in solution tend to stay in solution. Chloride concentrations in natural water vary from less than 1 mg/L in stream runoff from humid areas to more than 100,000 mg/L in ground and surface water associated with evaporites in arid areas. The discharge of human, animal, or industrial wastes and irrigation return flows may add significant quantities of chloride to surface and ground water.	Chloride may impart a salty taste to drinking water and may accelerate the corrosion of metals used in water-supply systems. The secondary maximum contaminant level of chloride for public water systems is 250 mg/L (U.S. Environmental Protection Agency, 1986c). Chloride also is objectionable in some industrial supplies, particularly those used for brewing and food processing, paper and steel production, and textile processing. Chloride in irrigation water generally is not toxic to most crops but may be injurious to citrus and stone friuts.

Table 9.--Source and significance of selected constituents and properties commonly reported in water analyses 1/--Continued

Constituent or property	Source or cause	Significance
Fluoride (F)	Fluoride is a minor constituent of the Earth's crust. The calcium fluoride mineral fluorite is a widespread constituent of resistate sediments and igneous rocks, but its solubility in water is negligible. Fluoride commonly is associated with volcanic gases, and volcanic emanations may be important sources of fluoride in some areas. The fluoride concentration in fresh surface water usually is less than 1 mg/L; but larger concentrations are not uncommon in saline water from oil wells, ground water from a wide variety of geologic terranes, and water from areas affected by volcanism.	Fluoride in drinking water decreases the incidence of tooth decay when the water is consumed during the period of enamel calcification. Excessive quantities in drinking water consumed by children during the period of enamel calcification may cause a characteristic discoloration (mottling) of the teeth. The maximum contaminant level of fluoride in drinking water is 2.0 mg/L and 4 mg/L (secondary and primary limits, U.S. Environmental Protection Agency, 1986b,c). Excessive fluoride also is objectionable in water supplies for some industries, particularly in the production of food, beverages, and pharmaceutical items.
Nitrogen (N)	A considerable part of the total nitrogen of the Earth is present as nitrogen gas in the atmosphere. Small quantities of nitrogen are present in rock, but the element is more concentrated in soils or biological material. Nitrogen is a cyclic element and may occur in water in several forms. The forms of most interest in water in order of increasing oxidation state, include organic nitrogen, ammonia (NH_3), nitrite (NO_2), and nitrate (NO_3). These forms of nitrogen in water may be derived naturally from the leaching of rocks, soils, and decaying vegetation; from rainfall; or from biochemical conversion of one form to another. Other important sources of nitrogen in water include effluent from wastewater treatment plants, septic tanks, and cesspools and drainage from barnyards, feed lots, and fertilized fields. Nitrate is the most stable form of nitrogen [excluding nitrogen gas (N)] in an oxidizing environment and usually is the dominant form of nitrogen in natural water and in polluted water that have undergone self-purification or aerobic treatment processes. Significant quantities of reduced nitrogen often are present in some ground water, deep unoxygenated water of stratified lakes and reservoirs, and water containing partially stabilized sewage or animal wastes.	Concentrations of any of the forms of nitrogen in water significantly larger than the local average may suggest pollution. Nitrate and nitrite are objectionable in drinking water because of the potential risk to bottle-fed infants for methemoglobinemia, a sometimes fatal illness related to the impairment of the oxygen-carrying ability of the blood. The maximum contaminant level of nitrate (as N) in drinking water is 10 mg/L (U.S. Environmental Protection Agency, 1986b). Although a maximum contaminant level for nitrite is not specified in the drinking water regulations, Appendix A to the regulations indicates that waters with nitrite concentrations (as N) more than 1 mg/L should not be used for infant feeding. Excessive nitrate and nitrite concentrations also are objectionable in water supplies for some industries particularly in water used for the dyeing of wool and silk fabrics and for brewing.

Table 9.--Source and significance of selected constituents and properties commonly reported in water analyses 1/--Continued

<table>
<tr><th>Constituent or property</th><th>Source or cause</th><th>Significance</th></tr>
<tr><td>Phosphorus (P)</td><td>Phosphorus is a major component of the mineral apatite, which is widespread in igneous rock and marine sediments. Phosphorus also is or has been a component of household detergents, fertilizers, human and animal metabolic wastes, and other biological material. Although small concentrations of phosphorus may occur naturally in water as a result of leaching from rocks, soils, and decaying vegetation, larger concentrations likely are to occur as a result of pollution.</td><td>Phosphorus stimulates the growth of algae and other nuisance aquatic plant growth, which may impart undesirable taste and odor to the water, become aesthetically unpleasant, alter the chemistry of the water supply, and affect water treatment processes.</td></tr>
<tr><td>Dissolved solids</td><td>Theoretically, dissolved solids are anhydrous residues of the dissolved substances in water. In reality, the term "dissolved solids" is defined by the method used in the determination. In most water, the dissolved solids consist predominantly of silica, calcium, magnesium, sodium, potassium, carbonate, bicarbonate, chloride, and sulfate with minor or trace quantities of other inorganic and organic constituents. In regions of large rainfall and relatively insoluble rocks, water may contain dissolved-solids concentrations of less than 25 mg/L; but saturated sodium chloride brines in other areas may contain more than 300,000 mg/L.</td><td>Dissolved-solids values are widely used in evaluating water quality and in comparing water. The following classification based on the concentrations of dissolved solids commonly is used by the U.S. Geological Survey (Winslow and Kister, 1956).
<table>
<tr><th>Classification</th><th>Dissolved-solids concentration (mg/L)</th></tr>
<tr><td>Fresh</td><td><1,000</td></tr>
<tr><td>Slightly saline</td><td>1,000 - 3,000</td></tr>
<tr><td>Moderately saline</td><td>3,000 - 10,000</td></tr>
<tr><td>Very saline</td><td>10,000 - 35,000</td></tr>
<tr><td>Brine</td><td>>35,000</td></tr>
</table>
A dissolved-solids concentration of 500 mg/L is the secondary maximum contaminant level for public water systems (U.S. Environmental Protection Agency, 1986c). This level was set primarily on the basis of taste thresholds and potential physiological effects, particularly the laxative effect on unacclimated users. Although drinking water containing more than 500 mg/L is undesirable, such water is used without any obvious ill effects in many areas where less mineralized supplies are not available. Dissolved solids in industrial water supplies can cause foaming in boilers; interfere with clearness, color, or taste of many finished products; and accelerate corrosion. Uses of water for irrigation also are limited by excessive dissolved-solids concentrations. Dissolved solids in irrigation water may adversely affect plants directly by the development of high osmotic conditions in the soil solution and the presence of phytoxins in the water or indirectly by their effect on soils.</td></tr>
</table>

Table 9.--Source and significance of selected constituents and properties commonly reported in water analyses 1/--Continued

Constituent or property	Source or cause	Significance
Specific conductance (microsiemens)	Specific conductance is a measure of the ability of water to transmit an electrical current and depends on the concentrations of ionized constituents dissolved in the water. Natural water in contact only with granite, well-leached soil, or other sparingly soluble material often has a conductance of less than 20 µS. The specific conductance of some brines exceed several hundred thousand microsiemens.	The specific conductance is an idication of the degree of mineralization of water and may be used to estimate the concentration of dissolved solids in the water.
Hardness as $CaCO_3$	Hardness of water is attributable to all polyvalent metals but principally to calcium and magnesium ions expressed as $CaCO_3$ (calcium carbonate). Water hardness results naturally from the solution of calcium and magnesium, both of which are widely distributed in common minerals of rocks and soil. Hardness of water in contact with limestone commonly exceeds 200 mg/L. In water from gypsiferous formations, a hardness of 1,000 mg/L is not uncommon.	Hardness values are used in evaluating water quality and in comparing water. The following classification is commonly used by the U.S. Geological Survey. Hardness (mg/L as $CaCO_3$) — Classification 0 - 60 — Soft 61 - 120 — Moderately hard 121 - 180 — Hard >180 — Very hard Excessive hardness of water for domestic use is objectionable because it causes incrustations on cooking utensils and water heaters and increased soap or detergent consumption. Excessive hardness also is undesirable in many industrial supplies. (See discussions concernin calcium and magnesium.)
pH	The pH of a solution is a measure of its hydrogen ion activity. The pH of pure water at a temperature of 25 °C is 7.00. Natural water contains dissolved gases and minerals, and the pH may deviate significantly from that of pure water. Rainwater not affected significantly by atmospheric pollution generally has a pH of 5.6 due to the solution of carbon dioxide from the atmosphere. The pH range of most natural surface and ground water is about 6.0 to 8.5. Natural water generally is slightly basic (pH >7.0) because of the prevalence of carbonate and bicarbonate, which tend to increase the pH.	Acidic water may have a sour taste, cause corrosion of metals and concrete, and affect water-treatment processes. The U.S. Environmental Protection Agency (1986c) recommends a pH range of 6.5 to 8.5 for public water systems.

1/ Most of the material in this table has been summarized from several references. For a more thorough discussio of the source and significance of these and other water-quality properties and constituents, the reader is referred to the following additional references: American Public Health Association and others (1985); Hem (1985); McKee and Wolf (1963); National Academy of Sciences, National Academy of Engineering (1973); National Technical Advisory Committee to the Secretary of the Interior (1968); and U.S. Environmental Protection Agency (1986a,b,c).

Table 10.--Summary of maximum contaminant levels for selected water-quality constituents and properties for public water systems 1/

[µg/L, micrograms per liter; mg/L, milligrams per liter; °C, degrees Celsius]

Constituent 2/	Maximum contaminant level 3/	Secondary maximum contaminant level 4/
Inorganic chemicals and related properties		
pH (standard units)	--	6.5 - 8.5
Arsenic (As)	50 µg/L	--
Barium (Ba)	1,000 µg/L	--
Cadmium (Cd)	10 µg/L	--
Chloride (Cl)	--	250 mg/L
Chromium (Cr)	50 µg/L	--
Copper (Cu)	--	1,000 µg/L
Iron (Fe)	--	300 µg/L
Lead (Pb)	50 µg/L	--
Manganese (Mn)	--	50 µg/L
Mercury (Hg)	2 µg/L	--
Nitrate (as N)	10 mg/L	--
Selenium (Se)	10 µg/L	--
Silver (Ag)	50 µg/L	--
Sulfate (SO4)	--	250 mg/L
Zinc (Zn)	--	5,000 µg/L
Dissolved solids	--	500 mg/L
Fluoride (F) 5/	4 mg/L	2 mg/L
Organic chemicals		
Chlorinated hydrocarbons		
Endrin	0.2 µg/L	--
Lindane	4 µg/L	--
Methoxychlor	100 µg/L	--
Toxaphene	5 µg/L	--
Chlorophenoxys		
2,4-D	100 µg/L	--
Silvex	10 µg/L	--

1/ Public water system.--A system for the provision of piped water to the public for human consumption, if such system has at least 15 service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.

2/ Constituent.--Any physical, chemical, biological, or radiological substance or matter in water.

3/ Maximum contaminant level.--The maximum permissible level of a contaminant in water which is delivered to the free flowing outlet of the ultimate user of a public water system. Maximum contaminant levels are those levels set by the U.S. Environmental Protection Agency (1986b) in the National Primary Drinking Water Regulations. These regulations deal with contaminants that may have a significant direct impact on the health of the consumer and are enforceable by Federal law.

4/ Secondary maximum contaminant level.--The advisable maximum level of a contaminant in water which is delivered to the free flowing outlet of the ultimate user of a public water system. Secondary maximum contaminant levels are those levels proposed by the U.S. Environmental Protection Agency (1986c) in the National Secondary Drinking Water Regulations. These regulations deal with contaminants that may not have a significant direct impact on the health of the consumer, but their presence in excessive quantities may affect the aesthetic qualities of the water and may discourage the use of a drinking-water supply by the public.

5/ Fluoride.--Revised (U.S. Environmental Protection Agency, 1986b,c) dissolved manganese in water near the bottom exceeded the maximum contaminant level of 50 µg/L. Also a concentration of 3.6 µg/L for mercury was detected in one sample from Lake Austin. At times, fecal-coliform bacteria densities for Lake Austin and Town Lake exceeded recommendations of 200 cols./100 mL for contact recreation. Water samples from Town Lake sometimes exceeded recommendations of 2,000 cols./100 mL for fecal coliform in raw water that is a source of public supply. The concentrations of iron, manganese, and bacterial densities do not pose a significant problem at this time (1987).

EFFECTIVENESS OF SAMPLING PROGRAM AND POTENTIAL CHANGES

Continued municipal and industrial growth in the Lake Austin and Town Lake basins will increase waste loads into the lake system and will require continuous effort by water users and planners to keep deterioration of water quality at a minimum. Although many years of data have been collected, there is a need to continually evaluate the effectiveness of the water-quality data-collection program, to monitor changes in population and land use, and to adjust the water-quality data-collection program to monitor these changes. The present water-quality data-collection program is adequate in most respects. This report, however, has already pointed to the need for additional data for the lakes.

Water-quality data collected for Lake Austin and Town Lake following runoff generally were not adequate to fully determine the effects of runoff on lakes. More comprehensive surveys are needed on both lakes following runoff. Although fixed-station sampling may be adequate for routine scheduled surveys, data collection needs not to be limited to fixed-station sampling following runoff. Sampling on both lakes needs to be done simultaneously and as soon as possible following significant precipitation.

It may also be beneficial to expand the current list of parameters to be analyzed. Sampling for chlorophyll and selected invertebrate species may be useful in determining the complete water-quality situation.

Because Austin is located at the end of the "highland lakes" chain, a comprehensive water-quality data-collection program in the highland lakes is needed to provide the data necessary for detecting changes in the reservoirs caused by increasing growth in this area. Municipal and industrial growth in the vicinity of the highland lakes will continue and is expected to affect the quality of water.

CONCLUSIONS

Lake Austin and Town Lake, impoundments on the Colorado River in Austin, serve as municipal and industrial water supplies, electrical-power generation, and recreational facilities for more than one-half millian people in the Austin metropolitan area in central Texas. The water quality of the two lakes was described on the basis of data collected at Lake Austin (1978-84) and Town Lake (1975-84), and includes the impact of surface-water runoff.

Impoundment of water in a lake or reservoir may result in beneficial as well as detrimental changes in the quality of water. Many of the detrimental effects usually associated with impoundments are related to thermal stratification, which does not occur in Lake Austin or Town Lake. Vertical temperature variations in the lakes were not large enough to allow for significant stratification. The largest detected vertical temperature variation was 6.5 °C in Lake Austin and 3.5 °C in Town Lake. The rather small vertical variations in temperature for both lakes can be attributed to the rather shallow depths in both lakes, and to the short retention time of water in the lakes during the summer months. Temperature data collected on Lake Austin indicate that at times the cold water released from Mansfield Dam underflows the warmer surface water immediately downstream from the dam.

Large vertical dissolved-oxygen gradients were not detected in Lake Austin or Town Lake. Average dissolved-oxygen concentrations for Lake Austin at site Ac had about a 2.5 mg/L variation from surface to bottom during the summer. At site Ac on Town Lake, average dissolved-oxygen concentrations differed by about 1 mg/L from surface to bottom. Small areal variations in dissolved oxygen were noted in Lake Austin and in Town Lake. The largest areal variations generally occur during the summer. Water released to Lake Austin during the summer is released from below the thermocline in Lake Travis, and consequently, dissolved-oxygen concentrations generally are small. As the water moves through Lake Austin, concentrations increase due to reaeration from the atmosphere and through photosynthetic production of oxygen. For example, in August 1984, dissolved-oxygen concentrations in Lake Austin increased from 2.8 mg/L at site Ec to slightly more than 7.0 mg/L at site Bc.

Dissolved trace-element data collected from Lake Austin and Town Lake indicate that, with the exception of manganese and mercury, none of the minor elements analyzed for exceeded either the primary maximum contaminant level or secondary maximum contaminant level set by the U.S. Environmental Protection Agency for public water systems. Concentrations of dissolved iron and dissolved manganese were generally quite small. Average concentrations of dissolved iron and dissolved manganese in water collected near the bottom of Lake Austin did not exceed 40 and 50 µg/L, respectively. On only one occasion did concentrations of dissolved iron and dissolved manganese exceed the maximum contaminant levels of 300 µg/L and 50 µg/L, respectively.

Little seasonal or areal variation was noted in nitrogen concentrations in Lake Austin or Town Lake. Organic nitrogen is the predominant nitrogen species in both lakes. During the summer, average concentrations of organic nitrogen in Lake Austin ranged from about 0.3 to 0.6 mg/L from samples collected near the surface and near the bottom. Average concentrations of organic nitrogen collected during the winter ranged from 0.4 to 0.8 mg/L. Average organic nitrogen concentrations in Town Lake during the summer ranged from about 0.4 to 0.7 mg/L from samples collected near the surface and near the bottom. Little areal or seasonal variation was detected in concentrations of organic nitrogen in Town Lake. Little seasonal or areal variation was noted in concentrations of ammonia nitrogen or in concentrations of nitrite plus nitrate nitrogen in either lake.

Stormwater runoff had little effect on nitrogen concentrations in Lake Austin. Nitrogen concentrations in Town Lake were slightly larger following periods of runoff. Total nitrogen concentrations in Town Lake following runoff often exceed 1.0 mg/L.

Total phosphorus concentrations generally are small in both Lake Austin and Town Lake. The average summer concentration of total phosphorus in Lake Austin and Town Lake was less than 0.03 mg/L. Approximately 95 percent of the measured total phosphorus concentrations in Lake Austin were less than 0.03 mg/L. About 81 percent of the measured total phosphorus concentrations in Town Lake were less than 0.03 mg/L. Total phosphorus concentrations in Town Lake were slightly larger than those in Lake Austin. The largest concentrations of total phosphorus detected in Town Lake occurred following runoff.

Little seasonal or areal variations were noted for dissolved solids or selected major ions in Lake Austin or Town Lake. Dissolved-solids concentrations ranged from 240 to 340 mg/L in Lake Austin and from 170 to 360 mg/L in Town Lake. The smallest dissolved-solids concentrations in Town Lake were detected following runoff. During periods of no runoff to Town Lake, dissolved-solids concentrations ranged from 240 to 360 mg/L, very similar to the range in Lake Austin.

Densities of fecal-coliform bacteria in Lake Austin ranged from less than 1 to 600 cols./100 mL, and densities of fecal-streptococci bacteria ranged from less than 1 to 340 cols./100 mL. Densities of fecal-coliform bacteria in Town Lake ranged from 4 to 14,000 cols./100 mL, and densities of fecal-streptococci bacteria ranged from less than 1 to 15,000 cols./100 mL. The largest densities of both bacteria were detected in Town Lake at sites Ac and Dc following runoff.

Little or no impact of stormwater runoff was detected on temperature, dissolved oxygen, or minor elements in Lake Austin or in Town Lake. Increased concentrations of nitrogen and phosphorus were detected in Town Lake following runoff, but not in Lake Austin. Concentrations of total nitrogen often exceeded 1.0 mg/L in Town Lake following runoff, and the largest concentration of total phosphorus detected occurred following 4 in. of precipitation. A decrease in concentrations of dissolved solids and selected major ions occurred in Town Lake following runoff. Similar decreases in dissolved solids and major ions were not detected in Lake Austin. Densities of fecal-coliform and fecal-streptococci bacteria were larger in Lake Austin and Town Lake following runoff. Densities of both indicator bacteria increased more substantially in Town Lake than in Lake Austin following runoff.

Water-quality data collected at Lake Austin and Town Lake following runoff generally were not adequate to determine accurately the effects of runoff on the lakes. More comprehensive surveys are needed on both lakes following runoff. Although fixed-station sampling may be adequate for routinely scheduled surveys, data collection need not be limited to fixed-station sampling following runoff. Sampling on both lakes needs to be done simultaneously and as soon as possible following significant precipitation.

REFERENCES

American Public Health Association and others, 1975, Standard methods for the examination of water and wastewater (14th ed.): Washington, D.C., American Public Health Association, 1193 p.

City of Austin, Watershed Management Division, 1984, Storm-water quality modeling for Austin Creeks: Austin, Texas, 10 p.

Geldreich, E.E., and Kenner, B.A., 1969, Concepts of fecal streptococci in stream pollution: Journal of the Water Pollution Control Federation, v. 41, part 2, p. A336-352.

Hem, J.D., 1985, Study and interpretation of the chemical characteristics of natural water (3d ed.): U.S. Geological Survey Water-Supply Paper 1473, 263 p.

McKee, J.E., and Wolf, H.W., 1963, Water quality criteria (2d ed.): California State Water Quality Board Publication 3-A, 548 p.

McPherson, Emma, and Mendieta, H.B., 1983, Water quality of Somerville Lake, south-central Texas: U.S. Geological Survey Water-Resources Investigations Report 82-4124, 88 p.

Mendieta, H.B. and Pate, D.L. 1982, Water quality of Belton Lake, central Texas: U.S. Geological Survey Open-File Report 82-650, 70 p.

National Academy of Sciences, National Academy of Engineering, 1973 [1974], Water quality criteria, 1972: Washington, D.C., Report of the Committee on Water Quality Criteria, 594 p.

National Technical Advisory Committee to the Secretary of the Interior, 1968, Water quality criteria: Washington, D.C., U.S. Government Printing Office, 234 p.

Roddy, W.R., and Waddell, K.M., 1982, Water quality of Canyon Lake, central Texas: U.S. Geological Survey Open-File Report 82-678, 68 p.

SAS Institute, Inc., 1982, SAS user's guide--Statistics, 1982 edition: Cary, North Carolina, 584 p.

U.S. Environmental Protection Agency, 1986a, Quality criteria for water, 1986: Washington, D.C., U.S. Government Printing Office, 440 p.

-----1986b, Maximum contaminant levels (subpart B of part 141, National primary drinking-water regulations): U.S. Code of Federal Regulations, Title 40, parts 100 to 149, revised as of July 1, 1986, p. 521-528.

-----1986c, Secondary maximum contaminant levels (section 143.3 of part 143, National secondary drinking-water regulations): U.S. Code of Federal Regulations, Title 40, parts 100 to 149, revised as of July 1, 1986, p. 587-590.

Weast, R.C., 1975, Handbook of chemistry and physics (56th ed.): Cleveland, Ohio, CRC Press, 2350 p.

Wells, F.C., and Schertz, T.L., 1984, Computation and use of volume-weighted-average concentrations to determine long-term variations of selected water-quality constituents in lakes and reservoirs: U.S. Geological Survey Water-Resources Investigations Report 83-4287, 8 p.

Wetzel, R.G., 1975, Limnology: Philadelphia, W.B. Saunders Co., 743 p.

Winslow, A.G., and Kister, L.R., 1956, Saline-water resources of Texas: U.S. Geological Survey Water-Supply Paper 1365, 105 p.

SUPPLEMENTAL INFORMATION

Table 11.--Chemical-quality survey of Lake Austin, October 17, 1978

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; m, meters; ---, not determined; <, less than; ND, not detected]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
17...	1.0	531	7.9	23.0	7.8	93
17...	10.0	531	7.9	22.5	7.8	92
17...	20.0	531	7.9	23.0	7.6	90
17...	34.0	531	7.8	23.0	7.1	85

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Oct										
17...	1.0	531	7.9	23.0	5	4.0	7.8	93	1.0	500
17...	10.0	531	7.9	23.0	--	--	7.7	92	--	--
17...	20.0	531	7.9	22.5	--	--	7.6	89	--	--
17...	30.0	531	7.8	22.5	--	--	7.5	88	--	--
17...	40.0	531	7.8	22.5	--	--	7.4	87	--	--
17...	45.0	531	7.8	22.5	--	--	7.4	87	--	--
17...	54.0	531	7.7	22.5	10	65	6.4	75	1.1	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium, adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)
Oct											
17...	4	1	190	51	43	20	33	1	3.8	170	139
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	180	43	40	20	32	1	3.8	170	139

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L))	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Oct											
17...	0	38	62	.20	9.8	290	2	1	.03	.010	.04
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	.03	.010	.04
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	0	38	62	.20	10	290	121	14	.03	.010	.04

Table 11.--Chemical-quality survey of Lake Austin, October 17, 1978--Continued

301739097471201 SITE Ac--Continued

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Oct											
17...	.010	.26	.27	.31	.020	2	<100	ND	ND	4	<10
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	.010	.36	.37	.41	.020	--	--	--	--	--	<10
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	.040	.48	.52	.56	.080	2	<100	ND	ND	4	30

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Oct											
17...	ND	<10	<.1	<1	ND	<20	<.0	<.00	<.0	<.000	<.000
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	20	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	ND	80	<.1	<1	ND	<20	<.0	<.00	<.0	<.000	<.000

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
Oct										
17...	<.000	<.00	<.000	<.000	<.000	<.00	<.000	<.000	<.000	<.00
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	<.000	<.00	<.000	<.000	<.000	<.00	<.000	<.000	<.000	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Oct										
17...	<.00	<.00	<.00	<.00	<.0	<.0	<.00	.04	<.00	<.00
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	<.00	<.00	<.00	<.00	<.0	<.0	<.00	<.00	<.00	<.00

Table 11.--Chemical-quality survey of Lake Austin, October 17, 1978--Continued

301739097470901 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
17...	1.0	531	7.9	23.0	8.0	95
17...	10.0	531	7.9	23.0	7.9	94
17...	16.0	531	7.9	23.0	7.9	94

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
Oct								
17...	1.0	531	7.8	23.0	1.50	7.4	88	.01
17...	10.0	531	7.8	23.0	--	7.2	86	--
17...	20.0	531	7.7	23.0	--	7.0	83	--
17...	28.0	531	7.7	22.5	--	6.9	81	.03

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct									
17...	.010	.02	.010	.39	.40	.42	.010	20	<10
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	.010	.04	.010	.34	.35	.39	.020	50	20

302044097472301 SITE B1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
17...	1.0	531	7.8	23.0	7.5	89
17...	11.0	531	7.8	23.0	7.6	90

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Oct										
17...	1.0	531	7.6	23.5	0	2.0	7.0	84	.6	520
17...	10.0	531	7.6	23.0	--	--	7.0	83	--	--
17...	20.0	531	7.6	23.0	--	--	6.8	81	--	--
17...	28.0	531	7.5	23.0	0	5.0	6.6	77	.4	--

Table 11.--Chemical-quality survey of Lake Austin, October 17, 1978--Continued

301926097502201 SITE Cc--Continued

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium, adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Oct											
17...	3	<1	180	46	38	20	34	1	4.0	160	131
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	180	46	38	20	34	1	3.8	160	131

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Oct											
17...	0	38	68	.20	9.6	290	2	1	.03	.010	.04
17...	--	--	--	--	--	--	--	--	.03	.010	.04
17...	--	--	--	--	--	--	--	--	--	--	--
17...	0	39	64	.20	9.8	290	7	1	.04	.010	.05

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Oct											
17...	.020	.32	.34	.38	.010	2	<100	ND	ND	4	<10
17...	.010	.45	.46	.50	.010	--	--	--	--	--	20
17...	--	--	--	--	--	--	--	--	--	--	--
17...	.030	.26	.29	.34	.010	2	<100	ND	ND	4	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
Oct											
17...	ND	<10	<.1	<1	ND	ND	<.0	<.00	<.000	<.0	<.000
17...	--	<10	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	ND	<10	<.1	<1	ND	ND	<.0	<.00	<.000	<.0	<.000

Date	DDE, total (µg/L)	DDT, total (µg/L	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
Oct											
17...	<.000	<.000	<.00	<.000	<.000	<.000	<.00	<.000	<.000	<.000	<.00
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	<.000	<.000	<.00	<.000	<.000	<.000	<.00	<.000	<.000	<.000	<.00

Table 11.--Chemical-quality survey of Lake Austin, October 17, 1978--Continued

301926097502201 SITE Cc--Continued

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Oct										
17...	<.00	<.00	<.00	<.00	<.0	<.0	<.00	.03	<.00	<.00
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	<.00	<.00	<.00	<.00	<.0	<.0	<.00	.02	<.00	<.00

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)
Oct								
17...	1.0	542	7.8	23.0	7.5	89	.04	.010
17...	10.0	542	7.8	22.5	7.4	87	--	--
17...	16.0	542	7.7	22.5	7.0	82	.02	.010

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct								
17...	.05	.010	.53	.54	.59	.020	<10	<10
17...	--	--	--	--	--	--	--	--
17...	.03	.020	.42	.44	.47	.020	<10	<10

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard-units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 1001mL)
Oct										
17...	1.0	552	8.2	25.0	0	2	9.3	115	.8	3,000
17...	7.0	555	8.1	23.5	5	15	8.5	102	2.3	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium, adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Oct											
17...	1	<1	180	47	38	21	36	1	4.0	160	135
17...	--	--	180	43	38	21	36	1	4.0	170	139

Table 11.--Chemical-quality survey of Lake Austin, October 17, 1978--Continued

302314097544901 SITE Ec--Continued

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Oct											
17...	2	40	71	.20	8.1	300	2	1	.01	.010	.02
17...	0	40	66	.20	8.1	300	24	4	.01	.010	.06

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Oct											
17...	.010	.28	.29	.31	.020	2	<100	ND	ND	4	<10
17...	.030	.56	.59	.65	.050	2	<100	ND	ND	4	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
Oct											
17...	ND	<10	<.1	<1	ND	ND	<.0	<.00	<.000	<.0	<.000
17...	ND	<10	<.1	<1	ND	ND	<.0	<.00	<.000	<.0	<.000

Date	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
Oct											
17...	<.000	<.000	<.00	<.000	<.000	<.000	<.00	<.000	<.000	<.000	<.00
17...	<.000	<.000	<.00	<.000	<.000	<.000	<.00	<.000	<.000	<.000	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Oct										
17...	<.00	<.00	<.00	<.00	<.0	<.0	<.00	<.00	<.00	<.00
17...	<.00	<.00	<.00	<.00	<.0	<.0	<.00	<.00	<.00	<.00

Table 12.--Chemical-quality survey of Lake Austin, February 07, 1979

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; m, meters; ---, not determined; K, non-ideal colony count; <, less than; ND, not detected

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
07...	1.0	548	8.5	8.0	12.0	104
07...	10.0	548	8.5	7.5	12.0	103
07...	20.0	553	8.5	7.5	11.9	103
07...	30.0	553	8.5	7.5	11.9	103
07...	40.0	553	8.5	7.5	11.9	103
07...	52.0	553	8.5	7.5	11.9	103

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Feb										
07...	1.0	548	8.5	8.0	0	2.0	11.9	103	1.1	K120
07...	10.0	548	8.5	8.0	--	--	11.9	103	--	--
07...	20.0	553	8.5	7.5	--	--	11.9	103	--	--
07...	30.0	553	8.5	7.5	--	--	11.9	103	--	--
07...	36.0	551	8.4	7.5	0	2.0	11.9	103	1.3	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Feb											
07...	K6	K12	200	51	44	21	32	1	3.0	170	146
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	190	38	42	21	32	1	3.0	180	154

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Feb											
07...	4	45	56	.20	7.1	300	2	1	.01	.020	.03
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	.03	.020	.05
07...	--	--	--	--	--	--	--	--	--	--	--
07...	4	45	52	.20	7.1	300	2	1	.00	.020	.02

best copy available

Table 12.--Chemical-quality survey of Lake Austin, February 07, 1979--Continued

301739097471201 SITE Ac--continued

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Feb											
07...	.010	.36	.37	.40	.020	1	<100	ND	<20	<2	<10
07...	--	--	--	--	--	--	--	--	--	--	--
07...	.010	.33	.34	.39	.020	--	--	--	--	--	<10
07...	--	--	--	--	--	--	--	--	--	--	--
07...	.010	.42	.43	.45	.030	1	<100	ND	<20	<2	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Feb											
07...	ND	<10	<.1	<1	ND	<20	<.0	<.00	<.0	<.00	<.00
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	<10	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	ND	<10	<.1	<1	ND	<20	<.0	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
Feb										
07...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

301739097470901 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
07...	1.0	548	8.5	8.0	11.8	103
07...	12.0	548	8.5	7.5	12.0	103

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
Feb								
07...	1.0	552	8.5	7.5	2.40	11.4	98	<.00
07...	10.0	552	8.5	7.5	--	11.4	98	--
07...	20.0	552	8.5	7.5	--	11.3	97	--
07...	28.0	552	8.5	7.5	--	11.2	97	<.00

Table 12.--Chemical-quality survey of Lake Austin, February 07, 1979--Continued

302043097472401 SITE Bc--Continued

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Feb									
07...	.020	.02	.010	.27	.28	.30	.010	<10	<10
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
07...	.020	.02	<.010	.30	.30	.32	.010	20	<10

302044097472301 SITE Bl

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
07...	1.0	552	8.5	8.0	11.7	102
07...	8.0	552	8.6	8.0	11.8	103

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Feb										
07...	1.0	536	8.4	8.0	0	5.0	11.0	96	.1	28
07...	10.0	536	8.4	8.0	--	--	11.0	96	--	--
07...	20.0	536	8.4	8.0	--	--	11.0	96	--	--
07...	27.0	536	8.4	8.0	0	4.0	11.0	96	.1	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)
Feb											
07...	K3	22	190	40	43	21	31	1	3.0	180	154
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	190	40	43	21	31	1	3.0	180	154

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Feb											
07...	4	41	56	.20	7.1	300	2	1	.03	.020	.05
07...	--	--	--	--	--	--	--	--	.00	.020	.02
07...	--	--	--	--	--	--	--	--	--	--	--
07...	4	41	56	.20	7.1	300	3	2	.03	.020	.05

Table 12.--Chemical-quality survey of Lake Austin, February 07, 1979--Continued

301926097502201 SITE Cc--Continued

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Feb											
07...	.030	.23	.26	.31	.010	1	<100	ND	20	<2	20
07...	.010	.29	.30	.32	.010	--	--	--	--	--	<10
07...	--	--	--	--	--	--	--	--	--	--	--
07...	.010	.26	.27	.32	.010	1	<100	ND	<20	<2	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Feb											
07...	ND	<10	<.1	<1	ND	ND	<.0	<.00	<.0	<.00	<.00
07...	--	<10	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	ND	<10	<.1	1	ND	<20	<.0	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor, epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
Feb										
07...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Feb										
07...	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00

3020210975[illegible]0001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)
Feb								
07...	1.0	527	8.6	8.5	11.1	98	.01	<.010
07...	10.0	527	8.6	8.5	11.2	99	--	--
07...	16.0	524	8.6	8.5	11.2	99	<.00	<.010

Table 12.--Chemical-quality survey of Lake Austin, February 07, 1979--Continued

302021097540001 SITE Dc--Continued

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Feb								
07...	.01	<.010	.28	.28	.29	.010	<10	<10
07...	--	--	--	--	--	--	--	--
07...	<.10	<.010	.28	.28	.28	.010	<10	<10

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Feb										
07...	1.0	538	8.5	9.5	0	3	11.7	105	.3	K20
07...	7.0	538	8.5	9.5	0	25	12.0	108	2.3	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)
Feb											
07...	K2	K6	200	56	48	20	33	1	3.4	170	146
07...	--	--	--	--	--	--	--	--	--	--	--

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Feb											
07...	4	45	62	.20	7.6	310	3	2	.05	.020	.07
07...	--	--	--	--	--	--	53	18	--	--	--

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)
Feb										
07...	.010	.20	.21	.28	.010	1	<100	ND	<20	<2
07...	--	--	--	--	--	--	--	--	--	--

Date	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	2,4-D, total (µg/L)	2,4,5-T total (µg/L)	Silvex, total (µg/L)
Feb										
07...	<10	ND	<10	<.1	<1	ND	<20	<.00	<.00	<.00
07...	--	--	--	--	--	--	--	--	--	--

Table 13.--Chemical-quality survey of Lake Austin, May 30, 1979

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; m, meters; ---, not determined; <, less than]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
30...	1.0	542	8.1	21.0	8.4	94
30...	10.0	542	8.1	18.0	8.2	87
30...	20.0	542	8.0	17.0	7.8	81
30...	30.0	545	8.0	16.0	7.5	77
30...	40.0	545	7.9	16.0	7.1	72
30...	53.0	545	7.9	16.0	6.8	69

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
May									
30...	1.0	542	8.1	21.0	5	8.4	94	.8	1,100
30...	10.0	542	8.0	18.0	--	8.2	87	--	--
30...	20.0	542	8.0	17.0	--	7.8	81	--	--
30...	30.0	545	7.9	16.0	--	7.5	77	--	--
30...	35.0	545	7.8	16.0	3	7.4	76	.3	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)
May										
30...	9	1	200	51	45	21	31	1	3.7	180
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	200	49	44	21	33	1	3.8	180

Date	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
May										
30...	148	0	43	56	.20	6.3	290	6	4	.15
30...	--	--	--	--	--	--	--	--	--	.14
30...	--	--	--	--	--	--	--	--	--	.17
30...	--	--	--	--	--	--	--	--	--	--
30...	148	0	43	58	.20	7.2	300	6	5	.21

Table 13.--Chemical-quality survey of Lake Austin, May 30, 1979--Continued

301739097471201 SITE Ac--Continued

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May									
30...	.020	.17	.010	.43	.44	.61	.020	<10	<10
30...	.020	.16	.030	.39	.42	.58	.010	<10	<10
30...	.020	.19	.040	.23	.27	.46	.010	<10	<10
30...	--	--	--	--	--	--	--	--	--
30...	.020	.23	.030	.26	.29	.52	.010	<10	<10

301739097471601 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
30...	1.0	542	8.2	21.5	8.6	98
30...	10.0	542	8.0	17.0	8.0	83
30...	15.0	542	8.0	17.0	7.6	79

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
May								
30...	1.0	542	8.2	22.5	1.90	8.3	97	.12
30...	10.0	542	8.2	22.0	--	8.5	98	--
30...	20.0	542	8.1	17.0	--	8.8	92	--
30...	28.0	542	8.1	17.0	--	8.8	92	.16

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May									
30...	.020	.14	.010	.35	.36	.50	.010	<10	<10
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	.020	.18	.030	.22	.25	.43	.010	<10	<10

302044097472301 SITE Bl

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
30...	1.0	542	8.2	23.0	8.2	96
30...	12.0	542	8.1	22.0	8.0	92

Table 13.--Chemical-quality survey of Lake Austin, May 30, 1979--Continued

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
May									
30...	1.0	542	8.2	21.0	3	8.6	97	.6	67
30...	10.0	542	8.1	15.5	--	8.8	89	--	--
30...	20.0	542	8.1	15.5	--	8.8	89	--	--
30...	27.0	542	8.1	15.5	3	8.8	89	.2	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO₃)	Hardness, noncarbonate (mg/L CaCO₃)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)
May										
30...	9	1	190	46	43	21	32	1	3.2	180
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	190	46	43	21	33	1	3.9	180

Date	Alkalinity, field (mg/L CaCO₃)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
May										
30...	148	0	43	58	.20	6.7	300	3	0	.17
30...	--	--	--	--	--	--	--	--	--	.19
30...	--	--	--	--	--	--	--	--	--	--
30...	148	0	43	58	.20	7.1	300	5	3	.24

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dis, solved (µg/L)	Manganese, dissolved (µg/L)
May									
30...	.020	.19	.020	.25	.27	.46	.010	<10	<10
30...	.020	.21	.020	.20	.22	.43	.010	<10	<10
30...	--	--	--	--	--	--	--	--	--
30...	<.010	.24	.020	.18	.20	.44	.010	<10	<10

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)
May								
30...	1.0	545	8.2	15.5	9.1	92	.22	<.010
30...	10.0	546	8.2	16.0	9.1	91	--	--
30...	14.0	545	8.2	15.0	9.4	94	.23	<.010

Table 13.--Chemical-quality survey of Lake Austin, May 30, 1979--Continued

302021097540001 SITE Dc--Continued

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May								
30...	.22	.020	.21	.23	.45	.010	<10	<10
30...	--	--	--	--	--	--	--	--
30...	.23	.020	.24	.26	.49	.010	<10	<10

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
May									
30...	1.0	545	8.0	13.5	3	7.9	77	.5	2,200
30...	8.0	545	8.0	13.5	3	7.8	76	.3	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium, adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)
May										
30...	2	<1	190	46	43	21	33	1	3.8	180
30...	--	--	190	46	43	21	33	1	3.8	180

Date	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
May										
30...	148	0	44	59	.30	7.3	300	4	4	.23
30...	148	0	43	58	.30	7.3	300	5	6	.32

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May									
30...	.020	.25	.010	.21	.22	.47	.010	200	<10
30...	.020	.34	.010	.21	.22	.56	.010	<10	<10

Table 14.--Chemical-quality survey of Lake Austin, August 21, 1979

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; NTU, nephelometric turbidity unit; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; ND, not detected]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
21...	1.0	538	7.9	24.0	7.3	87
21...	10.0	538	7.7	21.0	5.8	65
21...	20.0	538	7.6	20.5	5.5	61
21...	30.0	538	7.6	20.0	5.3	58
21...	40.0	538	7.6	20.0	5.0	55
21...	49.0	538	7.5	20.0	4.6	51

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)
Aug											
21...	1.0	538	8.0	25.0	5	.90	7.6	92	200	49	44
21...	10.0	538	7.7	21.0	--	--	5.9	66	--	--	--
21...	20.0	538	7.7	20.0	--	--	5.4	59	--	--	--
21...	30.0	538	7.7	20.0	--	--	5.1	56	--	--	--
21...	39.0	530	7.6	20.0	5	4.6	5.1	56	200	43	45

Date	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)
Aug												
21...	21	31	1	3.5	180	148	0	39	56	.30	8.3	290
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	21	30	1	3.6	190	156	0	38	54	.30	8.4	290

Date	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)
Aug												
21...	0	0	.11	.020	.13	.010	.52	.53	.66	<.010	1	70
21...	--	--	.20	.020	.22	.010	.17	.18	.40	<.010	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	3	.19	.020	.21	<.010	.06	.06	.27	<.010	1	70

Table 14.--Chemical-quality survey of Lake Austin, August 21, 1979--Continued

301739097471201 SITE Ac--Continued

Date	Cadmium, dis- solved (µg/L)	Chro- mium, dis- solved (µg/L)	Copper, dis- solved (µg/L)	Iron, dis- solved (µg/L)	Lead, dis- solved (µg/L)	Manga- nese, dis- solved (µg/L)	Mercury, dis- solved (µg/L)	Sele- nium, dis- solved (µg/L)	Silver, dis- solved (µg/L)	Zinc, dis- solved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)
Aug 21...	<2	<20	<2	<10	ND	1	<.1	<1	ND	30	<.0	<.00
21...	--	--	--	<10	--	<10	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	<2	ND	<2	<10	ND	3	<.1	<1	ND	3	<.0	<.00

Date	Chlor- dane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Di- azinon, total (µg/L)	Di- eldrin, total (µg/L)	Endo- sulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Hepta- chlor, total (µg/L)	Lindane, total (µg/L)
Aug 21...	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
21...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
21...	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Mala- thion, total (µg/L)	Methyl para- thion, total (µg/L)	Methyl tri- thion, total (µg/L)	Mirex, total (µg/L)	Para- thion, total (µg/L)	Per- thane, total (µg/L)	Tox- aphene, total (µg/L)	Tri- thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Aug 21...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.24	<.00	<.00
21...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
21...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00

301739097470901 SITE A1

Date	Sam- pling depth (feet)	Spe- cific con- duct- ance (µS/cm)	pH (stand- ard units)	Temper- ature (°C)	Oxygen, dis- solved (mg/L)	Oxygen, dis- solved (per- cent satu- ration)
Aug 21...	1.0	538	8.0	25.0	7.6	92
21...	14.0	536	7.7	20.5	5.2	58

302043097472401 SITE Bc

Date	Sam- pling depth (feet)	Spe- cific con- duct- ance (µS/cm)	pH (stand- ard units)	Temper- ature (°C)	Oxygen, dis- solved (mg/L)	Oxygen, dis- solved (per- cent satu- ration)	Nitro- gen, nitrate, total (mg/L)	Nitro- gen, nitrite, total (mg/L)
Aug 21...	1.0	538	8.0	26.0	7.4	91	.10	.020
21...	10.0	538	7.7	21.0	6.1	69	--	--
21...	20.0	538	7.7	20.5	5.7	63	--	--
21...	29.0	538	7.7	20.5	5.6	62	.20	.020

Table 14.--Chemical-quality survey of Lake Austin, August 21, 1979--Continued

302043097472401 SITE Bc--Continued

Date	Nitrogem, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen-total (μg/L)	Phosphorus, total (mg/L)	Chromium, dissolved (μg/L)	Iron, dissolved (μg/L)	Manganese, dissolved (μg/L)
Aug 21...	.12	.010	.20	.21	.33	<.010	ND	<10	<10
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	.22	.010	.08	.09	.31	.020	ND	<10	<10

302044097472301 SITE 91

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug 21...	1.0	538	8.0	26.5	7.5	93
21...	13.0	538	7.7	21.0	5.6	63

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)
Aug 21...	1.0	538	7.8	21.5	3	.70	6.2	70	200	41	44
21...	10.0	538	7.8	20.5	--	--	5.8	64	--	--	--
21...	20.0	538	7.8	20.0	--	--	5.7	63	--	--	--
21...	29.0	538	7.7	20.0	5	1.4	5.5	60	200	43	45

Date	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)
Aug 21...	21	30	1	3.5	190	156	0	39	55	.30	8.1	290
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	21	30	1	3.6	190	156	0	39	53	.30	8.3	290

Date	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (μg/L)	Barium, dissolved (μg/L)
Aug 21...	0	0	.18	.020	.20	.010	.09	.10	.30	<.010	1	70
21...	--	--	.19	.020	.21	.080	1.2	1.3	1.5	.040	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	0	0	.19	.020	.21	.010	.14	.15	.36	<.010	1	70

Table 14.--Chemical-quality survey of Lake Austin, August 21, 1979--Continued

301926097502201 SITE Cc--Continued

Date	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)
Aug 21...	<2	20	<2	<10	ND	7	<.1	<1	ND	3	<.0	<.00
21...	--	ND	--	<10	--	<10	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	<2	<20	<2	<10	ND	8	<.1	<1	ND	6	<.0	<.00

Date	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)
Aug 21...	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T total (µg/L)	Silvex, total (µg/L)
Aug 21...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00
21...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
21...	<.00	<.00	<.00	<.00	<.00	<.0	0	--	.08	<.00	<.00

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)
Aug 21...	1.0	538	7.7	19.0	4.6	49	.21	.020
21...	10.0	538	7.6	18.5	4.3	46	--	--
21...	17.0	538	7.6	19.0	4.2	45	.21	.020

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total, (mg/L)	Chromium, dissolved (µg/L	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Aug 21...	.23	.010	<.00	.01	.24	.010	ND	<10	<10
21...	--	--	--	--	--	--	--	--	--
21...	.23	.010	.36	.37	.60	<.010	ND	<10	20

Table 14.--Chemical-quality survey of Lake Austin, August 21, 1979--Continued

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)
Aug											
21...	1.0	535	7.6	18.0	5	.30	3.2	34	210	55	48
21...	9.0	535	7.6	18.0	3	1.5	3.6	38	200	41	46

Date	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)
Aug												
21...	22	31	1	3.2	190	156	0	38	54	.20	8.3	300
21...	20	31	1	3.2	190	156	0	38	53	.20	8.3	290

Date	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)
Aug												
21...	24	3	.23	.020	.25	<.010	.04	.04	.29	<.010	1	<100
21...	3	0	.23	.020	.25	.010	.60	.61	.86	<.010	1	<100

Date	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)
Aug												
21...	ND	20	ND	<10	ND	<10	<.1	<1	ND	2	<.0	<.00
21...	ND	ND	ND	<10	ND	<10	<.1	<1	ND	6	<.0	--

Date	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)
Aug												
21...	<.0	<.00	<.00	<.00	<.00	<.00	--	<.00	<.00	<.00	<.00	<.00
21...	--	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	--

Date	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Aug											
21...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00
21...	<.00	<.00	<.00	<.00	<.00	<.0	--	<.00	--	<.00	<.00

Table 15.--Chemical-quality survey of Lake Austin, March 05, 1980

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meter; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
05...	1.0	527	8.1	12.5	10.3	97
05...	10.0	527	8.1	12.5	10.3	97
05...	18.0	527	8.1	12.5	10.3	97

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Mar											
05...	1.0	527	8.1	12.5	1.80	5	2.3	10.3	97	.7	800
05...	10.0	527	8.1	12.5	--	--	--	10.3	97	--	--
05...	20.0	527	8.1	12.5	--	--	--	10.3	97	--	--
05...	30.0	527	8.1	12.5	--	--	--	10.3	97	--	--
05...	34.0	527	8.1	12.5	--	1	2.5	10.3	97	.8	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)
Mar											
05...	12	17	210	45	48	23	27	.8	3.4	210	170
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	210	42	47	23	28	.9	3.4	210	170

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Mar											
05...	0	35	44	.20	7.9	290	0	0	.05	<.000	.05
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	.05	<.000	.05
05...	--	--	--	--	--	--	--	--	--	--	--
05...	0	36	44	.20	7.9	290	0	0	.06	<.000	.06

Table 15.--Chemical-quality survey of Lake Austin, March 05, 1980--Continued

301739097471201 SITE Ac--Continued

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Mar											
05...	.010	.36	.37	.42	.010	1	70	<1	0	0	<10
05...	--	--	--	--	--	--	--	--	--	--	--
05...	.010	.41	.42	.47	.010	--	--	--	--	--	0
05...	--	--	--	--	--	--	--	--	--	--	--
05...	.010	.34	.35	.41	.010	1	70	<1	0	1	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
Mar											
05...	0	<1	.4	0	0	<3	<.0	<.00	<.00	<.0	<.00
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	10	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	0	<1	.2	0	0	<3	<.0	<.00	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
Mar											
05...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methoxychlor, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Mar											
05...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.35	<.00	<.00
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.61	<.00	<.00

301739097470901 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
05...	1.0	527	8.1	12.5	10.3	97
05...	10.0	527	8.1	12.5	10.3	97
05...	18.0	527	8.1	12.5	10.3	97

Table 15.--Chemical-quality survey of Lake Austin, March 05, 1980--Continued

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
Mar								
05...	1.0	505	8.1	13.0	2.70	10.0	96	.04
05...	10.0	505	8.1	12.5	--	10.0	94	--
05...	20.0	505	8.1	12.5	--	10.0	94	--
05...	28.0	505	8.1	12.5	--	9.8	92	.03

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar									
05...	<.000	.04	<.000	.62	.62	.66	<.000	0	10
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	<.000	.03	.010	.40	.41	.44	<.000	0	10

302044097472301 SITE B1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
05...	1.0	505	8.1	13.0	10.0	96
05...	12.0	505	8.1	12.5	10.0	94

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Mar											
05...	1.0	486	8.1	13.0	3.3	2	1.4	10.4	100	.4	150
05...	10.0	486	8.1	13.0	--	--	--	10.4	100	--	--
05...	20.0	486	8.1	12.5	--	--	--	10.4	98	--	--
05...	27.0	486	8.1	12.0	--	2	1.0	9.9	93	.4	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Mar											
05...	4	9	200	40	42	22	27	.9	3.3	190	156
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	190	33	41	21	26	.8	3.3	190	156

Table 15.--Chemical-quality survey of Lake Austin, March 05, 1980--Continued

301926097502201 SITE Cc--Continued

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Mar											
05...	0	30	43	.20	8.3	270	0	0	.02	<.000	.02
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	.04	<.000	.04
05...	0	31	43	.20	8.2	270	0	0	.02	<.000	.02

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Mar											
05...	<.000	1.9	1.9	1.9	<.000	1	60	<1	0	0	<10
05...	--	--	--	--	--	--	--	--	--	--	--
05...	.010	1.3	1.3	1.3	<.000	--	--	--	--	--	0
05...	.010	.29	.30	.32	<.000	1	60	<1	0	0	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
Mar											
05...	0	2	.1	0	0	<3	<.0	<.00	<.00	<.0	<.00
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	10	--	--	--	--	--	--	--	--	--
05...	0	3	.2	0	0	<3	<.0	<.00	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
Mar											
05...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methoxychlor, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Mar											
05...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.22	<.00	.01
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.22	<.00	.02

Table 15.--Chemical-quality survey of Lake Austin, March 05, 1980--Continued

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
Mar								
05...	1.0	486	8.1	13.0	3.00	10.1	96	.02
05...	10.0	486	8.1	12.5	--	10.1	95	--
05...	15.0	486	8.1	12.5	--	10.1	97	.03

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar									
05...	<.000	.02	<.000	.37	.37	.39	<.000	0	20
05...	--	--	--	--	--	--	--	--	--
05...	<.000	.03	.010	.38	.39	.42	.010	0	20

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Mar											
05...	1.0	475	8.1	13.5	1.50	5	3.1	10.8	104	.4	820
05...	7.0	475	8.1	13.5	--	5	3.0	10.8	104	.4	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO$_3$)
Mar											
05...	3	2	190	31	40	21	26	.9	3.2	190	156
05...	--	--	190	31	40	21	26	.9	3.2	190	156

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Mar											
05...	0	30	43	.20	7.2	260	3	3	.05	<.000	.05
05...	0	31	42	.20	7.3	260	0	0	.06	<.000	.06

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Mar											
05...	<.000	.35	.35	.40	<.000	1	60	<1	0	0	<10
05...	.030	.55	.58	.64	.020	1	60	<1	0	0	<10

Table 15.--Chemical-quality survey of Lake Austin, March 05, 1980--Continued

302314097544901 SITE Ec--Continued

Date	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Sele-nium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Naph-tha-lenes, poly-chlor., total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)	DDD, total (µg/L)
Mar											
05...	0	2	.2	0	0	<3	<.0	<.00	<.00	<.0	<.00
05...	0	2	.2	0	0	<3	<.0	<.00	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endo-sulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)	Lindane, total (µg/L)	Mala-thion, total (µg/L)
Mar											
05...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
05...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Meth-oxy-chlor, total (µg/L)	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	Mirex, total (µg/L)	Para-thion, total (µg/L)	Per-thane, total (µg/L)	Tox-aphene, total (µg/L)	Tri-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Mar											
05...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00
05...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00

Table 16.--Chemical-quality survey of Lake Austin May 20, 1980

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; >, more than]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
20...	1.0	481	7.9	23.5	9.0	107
20...	10.0	481	7.9	22.5	8.9	103
20...	20.0	478	7.7	18.5	6.2	67
20...	30.0	478	7.7	18.0	5.9	63
20...	40.0	478	7.7	18.0	6.0	64
20...	50.0	478	7.7	17.5	5.6	59
20...	54.0	478	7.6	17.5	5.1	54

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
20...	1.0	481	7.9	23.5	1.92	5	5.5	9.0	107	.9
20...	10.0	481	7.9	22.5	--	--	--	9.1	106	--
20...	20.0	478	7.7	18.5	--	--	--	6.2	67	--
20...	30.0	478	7.6	18.0	--	--	--	6.0	64	--
20...	35.0	478	7.6	18.0	--	0	5.6	6.0	64	.4

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
May										
20...	18	6	1	200	35	49	20	21	.7	2.9
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	190	34	43	21	23	.7	3.2

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
May										
20...	210	170	0	29	32	.20	8.4	270	18	18
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	190	160	0	28	37	.20	8.9	260	28	13

Table 16.--Chemical-quality survey of Lake Austin, May 20, 1980--Continued

301739097471201 SITE Ac--Continued

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May										
20...	.15	.010	.16	.010	.46	.47	.63	.010	<10	<3
20...	--	--	--	--	--	--	--	--	--	--
20...	.11	.010	.12	.040	.34	.38	.50	.010	20	0
20...	--	--	--	--	--	--	--	--	--	--
20...	.13	.010	.14	.060	1.0	1.1	1.2	.010	<10	<3

301739097470901 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
20...	1.0	481	7.8	23.5	9.1	108
20...	10.0	481	7.8	22.5	9.1	106
20...	16.0	478	7.6	21.5	7.4	84

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
May								
20...	1.0	481	7.9	24.0	1.95	8.5	101	.15
20...	10.0	481	7.8	22.0	--	8.2	94	--
20...	20.0	481	7.7	19.0	--	6.4	70	--
20...	28.0	481	7.5	18.0	--	4.9	52	.05

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May									
20...	.010	.16	.010	.47	.48	.64	.010	10	0
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	.010	.06	.070	.33	.40	.46	.010	30	10

302044097472301 SITE B1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
20...	1.0	481	7.9	24.0	8.6	102
20...	1.0	481	7.8	22.0	8.2	94

Table 16.--Chemical-quality survey of Lake Austin, May 20, 1980--Continued

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
20...	1.0	474	7.9	24.5	2.19	0	5.4	8.4	102	.6
20...	10.0	482	7.8	21.0	--	--	--	7.9	89	--
20...	20.0	482	7.6	18.0	--	--	--	5.7	61	--
20...	28.0	482	7.6	18.0	--	5	1.6	--	61	.5

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
May										
20...	9	4	1	200	28	48	19	20	.6	2.8
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	190	--	45	20	21	.7	3.0

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
May										
20...	210	170	0	27	31	.20	8.4	260	17	14
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	>200	--	0	27	34	.20	9.7	258	8	0

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May										
20...	.13	.010	.14	.010	.44	.45	.59	.010	<10	<3
20...	.09	.010	.10	.010	.52	.53	.63	.030	20	0
20...	--	--	--	--	--	--	--	--	--	--
20...	.05	.010	.06	.060	1.3	1.4	1.5	.010	<10	5

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
May								
20...	1.0	479	7.8	24.0	1.80	8.1	96	.12
20...	10.0	479	7.8	22.0	--	8.0	92	--
20...	14.0	479	7.6	21.0	--	6.3	71	.08

302021097540001 SITE Dc--Continued

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May									
20...	.010	.13	<.000	.40	.40	.53	.010	20	10
20...	--	--	--	--	--	--	--	--	--
20...	.010	.09	.090	.35	.44	.53	.030	20	70

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
20...	1.0	487	8.0	16.5	2.38	5	2.8	7.4	76	.3
20...	8.0	487	8.2	15.0	--	0	4.0	8.3	83	.4

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
May										
20...	4	2	1	190	29	41	21	24	.8	3.3
20...	--	--	--	190	29	41	21	24	.8	3.3

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
May										
20...	190	160	0	28	41	.20	8.7	260	14	8
20...	190	160	0	30	40	.20	8.8	260	10	0

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May										
20...	.12	.010	.13	.010	1.1	1.1	1.2	.010	<10	3
20...	.05	.010	.06	<.000	.34	.34	.40	.010	30	3

Table 17.--Chemical-quality survey of Lake Austin, July 30, 1980

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; K, non-ideal colony count; <, less than]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
30...	1.0	489	7.9	25.0	7.7	94
30...	10.0	489	7.8	21.5	6.9	78
30...	20.0	489	7.8	21.5	6.7	76
30...	32.0	489	7.8	21.0	6.3	71

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
July											
30...	1.0	489	8.0	25.5	2.19	0	1.3	8.0	98	.9	200
30...	10.0	489	7.8	21.5	--	--	--	6.9	78	--	--
30...	20.0	489	7.8	21.0	--	--	--	6.7	75	--	--
30...	30.0	489	7.7	21.0	--	--	--	6.5	73	--	--
30...	40.0	489	7.7	20.5	--	--	--	6.1	68	--	--
30...	54.0	489	7.6	20.5	--	10	4.7	5.4	60	1.0	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
July											
30...	47	K4	180	26	40	20	24	.8	3.4	190	156
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	180	29	41	20	24	.8	3.0	190	156

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
July											
30...	0	29	43	.40	8.2	260	1	2	.04	.010	.05
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	.08	.010	.09
30...	--	--	--	--	--	--	--	--	--	--	--
30...	0	29	43	.20	9.1	260	6	3	.09	.010	.10

Table 17.--Chemical-quality survey of Lake Austin, July 30, 1980--Continued

301739097471201 SITE Ac--Continued

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
July											
30...	<.000	1.3	1.3	1.4	.010	1	60	<1	10	0	<10
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	.010	.99	1.0	1.1	.010	--	--	--	--	--	10
30...	--	--	--	--	--	--	--	--	--	--	--
30...	.040	1.1	1.1	1.2	.010	1	60	2	0	3	20

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
July											
30...	1	<1	.6	0	0	<3	<.0	<.00	<.00	<.0	<.00
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	10	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	7	7	3.6	0	0	7	<.0	<.00	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
July											
30...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methoxychlor, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
July											
30...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.13	<.00	<.00
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.02	<.00	<.00

301739097470901 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
30...	1.0	489	8.0	25.5	8.1	99
30...	10.0	489	7.8	21.5	6.5	74
30...	16.0	489	7.7	21.5	6.2	70

Table 17.--Chemical-quality survey of Lake Austin, July 30, 1980--Continued

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
July								
30...	1.0	489	8.0	27.5	1.98	7.7	98	.01
30...	10.0	489	8.0	23.5	--	7.7	91	--
30...	20.0	489	7.9	21.0	--	6.8	76	--
30...	29.0	489	7.8	21.0	--	6.4	73	.07

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
July									
30...	.010	.02	<.000	1.1	1.1	1.1	.010	20	10
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	.010	.08	.010	.72	.73	.81	.010	10	10

302044097472301 SITE B1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
30...	1.0	489	8.0	28.0	7.5	96
30...	7.0	489	7.9	27.5	7.4	94

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
July											
30...	1.0	489	8.0	23.5	3.5	0	.60	7.7	91	.5	100
30...	10.0	489	7.9	20.5	--	--	--	6.9	77	--	--
30...	20.0	489	7.9	20.5	--	--	--	6.8	76	--	--
30...	28.0	489	7.9	20.5	--	0	1.1	6.8	76	.7	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)
July											
30...	27	K6	180	29	41	20	24	.8	3.1	190	156
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	180	29	41	20	24	.8	3.3	190	156

Table 17.--Chemical-quality survey of Lake Austin, July 30, 1980--Continued

301926097502201 SITE Cc--Continued

Date	Carbonate fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
July											
30...	0	29	44	.20	8.6	260	0	0	.06	.010	.07
30...	--	--	--	--	--	--	--	--	.07	.010	.08
30...	--	--	--	--	--	--	--	--	--	--	--
30...	0	29	46	.20	8.7	270	4	2	.07	.010	.08

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
July											
30...	.010	.58	.59	.66	.010	1	60	<1	0	0	<10
30...	.010	.99	1.0	1.1	.030	--	--	--	--	--	0
30...	--	--	--	--	--	--	--	--	--	--	--
30...	.010	.64	.65	.73	.010	1	60	2	0	1	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
July											
30...	2	7	.1	0	0	<3	<.0	<.00	<.00	<.0	<.00
30...	--	20	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	5	10	.2	0	0	<3	<.0	<.00	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
July											
30...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methoxychlor, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T total (µg/L)	Silvex, total, (µg/L)
July											
30...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.05	<.00	<.00
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	--	<.00	<.00

Table 17.--Chemical-quality survey of Lake Austin, July 30, 1980--Continued

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
July								
30...	1.0	489	7.9	19.0	3.5	6.0	65	.10
30...	10.0	489	7.8	18.5	--	5.7	62	--
30...	16.0	489	7.8	18.5	--	5.5	60	.12

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
July									
30...	.010	.11	.010	.52	.53	.64	.010	10	10
30...	--	--	--	--	--	--	--	--	--
30...	.010	.13	.010	.53	.54	.67	.010	10	10

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
July											
30...	1.0	489	7.8	18.5	2.13	0	.70	5.2	56	.4	80
30...	9.0	489	7.8	18.5	--	0	1.4	5.0	54	.5	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
July											
30...	<1	<1	180	26	40	20	24	.8	3.3	190	156
30...	--	--	180	29	41	20	24	.8	3.5	190	156

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
July											
30...	0	29	44	.40	6.5	260	4	0	.11	<.000	.11
30...	0	32	44	.40	6.5	270	2	0	.10	.010	.11

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
July											
30...	<.000	1.3	1.3	1.4	.010	1	60	<1	10	0	<10
30...	<.000	1.1	1.1	1.2	.010	1	60	<1	10	0	<10

Table 17.--Chemical-quality survey of Lake Austin, July 30, 1980--Continued

302314097544901 SITE Ec--Continued

Date	Lead, dis-solved (µg/L)	Manganese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Selenium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Naphthalenes, poly-chlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
July											
30...	0	2	<.0	0	0	<3	<.0	<.00	<.00	<.0	<.00
30...	0	2	<.0	0	0	<3	<.0	<.00	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endo-sulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)	Lindane, total (µg/L)	Mala-thion, total (µg/L)
July											
30...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
30...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Meth-oxy-chlor, total (µg/L)	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	Mirex, total (µg/L)	Para-thion, total (µg/L)	Per-thane, total (µg/L)	Tox-aphene, total (µg/L)	Tri-thion total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
July											
30...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00
30...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00

Table 18.--Chemical-quality survey of Lake Austin, March 02, 1981

[μS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; μm-MF, micrometer membrane filter; NO2+NO3, nitrite plus nitrate; μg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
02...	1.0	496	8.3	15.5	8.7	88
02...	10.0	496	8.3	15.5	8.7	88
02...	20.0	496	8.2	15.5	8.6	87
02...	32.0	496	8.2	15.5	8.5	86

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Mar										
02...	1.0	498	8.3	15.5	3.00	0	.90	9.1	92	.7
02...	10.0	499	8.3	15.5	--	--	--	9.1	92	--
02...	20.0	499	8.3	15.5	--	--	--	9.0	91	--
02...	30.0	502	8.3	15.5	--	--	--	8.9	90	--
02...	35.0	499	8.2	14.0	--	--	--	9.3	91	--
02...	40.0	502	8.2	12.5	--	--	--	9.4	89	--
02...	53.0	502	8.1	12.0	--	5	1.5	9.5	89	.4

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 μm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)
Mar											
02...	93	88	130	190	47	42	20	31	1	3.4	140
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	190	52	42	21	32	1	3.5	140

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Mar											
02...	39	55	.20	5.5	280	3	1	.08	.020	.10	<.000
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	.10	<.000	.10	<.000
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	41	55	.20	6.7	290	3	2	.12	.010	.13	<.000

Table 18.--Chemical-quality survey of Lake Austin, March 02, 1981--Continued

301739097471201 SITE Ac--Continued

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (mg/L)	Barium, dissolved (mg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)
Mar											
02...	.55	.55	.65	.030	2	70	<1	0	<10	<10	<10
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	.54	.54	.64	.030	--	--	--	--	--	50	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	.68	.68	.81	.030	1	70	<1	0	<10	40	<10

Date	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Mar											
02...	<1	<.0	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	10	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	10	<.0	0	0	5	<.0	<.00	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methoxychlor, total (µg/L)
Mar											
02...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4-DP, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Mar											
02...	<.00	<.00	<.00	<.00	<.0	0	<.00	.22	<.00	<.00	<.00
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	<.00	<.00	<.00	<.00	<.0	0	<.00	.08	<.00	<.00	<.00

Table 18.--Chemical-quality survey of Lake Austin, March 02, 1981--Continued

301739097470901 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
02...	1.0	496	8.3	15.5	8.3	84
02...	14.0	496	8.3	15.5	8.0	81

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
Mar								
02...	1.0	496	8.3	15.5	2.70	9.9	100	.13
02...	10.0	496	8.3	15.5	--	9.9	100	--
02...	20.0	496	8.2	15.5	--	9.9	100	--
02...	32.0	496	8.2	14.0	--	9.9	97	.12

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar									
02...	<.000	.13	<.000	.62	.62	.75	.030	30	0
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	<.000	.12	<.000	.56	.56	.68	.040	30	0

302044097472301 SITE B1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
02...	1.0	497	8.3	16.0	10.0	102
02...	10.0	497	8.3	15.5	10.0	101
02...	18.0	497	8.2	15.5	10.0	101

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Mar										
02...	1.0	490	8.3	16.5	3.6	0	.90	9.7	100	.7
02...	10.0	490	8.3	16.0	--	--	--	9.8	100	--
02...	20.0	495	8.2	15.0	--	--	--	10.0	100	--
02...	28.0	497	8.0	14.0	--	0	.70	10.3	101	.9

Table 18.--Chemical-quality survey of Lake Austin, March 02, 1981--Continued

301926097502201 SITE Cc--Continued

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved, (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)
Mar											
02...	31	K1	K5	180	42	40	20	30	1	3.5	140
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	180	45	41	20	31	1	3.5	140

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Mar											
02...	39	56	.20	5.7	280	1	0	.07	.020	.09	<.000
02...	--	--	--	--	--	--	--	.11	<.000	.11	<.000
02...	--	--	--	--	--	--	--	--	--	--	--
02...	39	55	.20	6.7	280	1	1	.11	.010	.12	<.000

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)
Mar											
02...	.49	.49	.58	.040	2	70	1	0	<10	<10	<10
02...	.55	.55	.66	.040	--	--	--	--	--	20	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	.57	.57	.69	.030	2	70	<1	0	<10	<10	<10

Date	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Mar											
02...	<1	<.0	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00
02...	0	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	3	<.0	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methoxychlor, total (µg/L)
Mar											
02...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Table 18.--Chemical-quality survey of Lake Austin, March 02, 1981--Continued

301926097502201 SITE Cc--Continued

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4-DP, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Mar											
02...	<.00	<.00	<.00	<.00	<.0	0	<.00	.91	<.00	<.00	<.00
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	<.00	<.00	<.00	<.00	<.0	0	<.00	.81	<.00	<.00	<.00

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
Mar								
02...	1.0	489	8.4	16.0	3.2	9.8	100	.12
02...	10.0	497	8.0	14.5	--	8.4	83	--
02...	15.0	497	8.0	14.5	--	8.5	84	.14

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar									
02...	<.000	.12	<.000	.82	.82	.94	.030	20	0
02...	--	--	--	--	--	--	--	--	--
02...	<.000	.14	<.000	1.2	1.2	1.3	.030	20	20

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Mar										
02...	1.0	494	8.2	13.5	2.10	5	1.7	10.3	100	.6
02...	7.0	494	8.2	13.0	--	5	1.3	10.3	99	.6

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Mar											
02...	28	18	<1	190	47	42	20	31	1	3.5	140
02...	--	--	--	180	45	41	20	32	1	3.5	140

Table 10.--Chemical-quality survey of Lake Austin, March 02, 1981--Continued

302314097544901 SITE Ec--Continued

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Mar											
02...	40	56	.20	7.2	280	1	1	.19	.010	.20	<.000
02...	40	56	.20	7.3	280	1	0	.19	.010	.20	<.000

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)
Mar											
02...	.51	.51	.71	.030	2	80	<1	10	<10	<10	19
02...	.46	.46	.66	.030	2	70	<1	0	<10	<10	<10

Date	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Mar											
02...	3	<.0	0	0	30	<.0	<.00	<.00	<.0	<.00	<.00
02...	2	.3	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, (µg/L)	Methoxychlor, total (µg/L)
Mar											
02...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
02...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4-DP, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (ug/L)
Mar											
02...	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00	<.00
02...	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00	<.00

Table 19.--Chemical-quality survey of Lake Austin, July 28, 1981

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; K, non-ideal colony count; <, less than; >, more than]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July 28...	1.0	464	7.4	27.5	5.5	70
28...	10.0	464	7.2	26.5	4.2	52
28...	20.0	471	7.2	26.0	3.5	43
28...	34.0	474	7.1	26.0	3.0	37

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
July 28...	1.0	476	7.4	27.5	1.20	5	2.0	5.3	67	.8
28...	10.0	476	7.2	26.5	--	--	--	4.1	51	--
28...	20.0	476	7.2	26.0	--	--	--	3.9	48	--
28...	30.0	480	7.1	26.0	--	--	--	3.3	41	--
28...	40.0	482	7.1	26.0	--	--	--	3.1	38	--
28...	52.0	485	7.0	26.0	--	5	12	1.7	21	.8

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
July 28...	K56	K10	K7	180	23	42	19	24	.8	3.4	160
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	180	32	43	18	25	.8	3.5	150

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
July 28...	22	41	.20	8.5	260	9	4	.60	<.000	.60	.610
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	.61	<.000	.64	.590
28...	22	41	.20	8.9	250	19	19	.16	<.000	.20	.240

Table 19.--Chemical-quality survey of Lake Austin, July 28, 1981--Continued

301739097471201 SITE Ac--Continued

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)
July											
28...	.16	.77	1.4	.010	2	70	<1	10	<10	<10	<10
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	.10	.69	1.3	.020	--	--	--	--	--	40	--
28...	.58	.82	1.0	.020	1	60	<1	10	<10	<10	17

Date	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
July											
28...	2	.1	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	30	--	--	--	--	--	--	--	--	--	--
28...	95	.0	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methoxychlor, total (µg/L)
July											
28...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4-DP, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
July											
28...	<.00	<.00	<.00	<.00	<.0	0	<.00	.32	<.00	<.00	<.00
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	<.00	<.00	<.00	<.00	<.0	0	<.00	.19	<.00	.01	<.00

301739097470901 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
28...	1.0	470	7.8	28.5	7.1	91
28...	9.0	474	7.2	26.0	3.7	46

Table 19.--Chemical-quality survey of Lake Austin, July 28, 1981--Continued

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
July								
28...	1.0	475	7.6	29.0	1.50	6.2	81	.13
28...	10.0	475	7.5	28.5	--	5.8	74	--
28...	20.0	470	7.2	26.0	--	4.1	51	--
28...	32.0	470	7.2	26.0	--	4.3	53	.19

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
July									
28...	.030	.16	.150	.53	.68	.84	.010	40	0
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
29...	.020	.21	.150	.59	.74	.95	.030	20	10

302044097472301 SITE B1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
28...	1.0	480	7.6	29.0	6.3	82
28...	10.0	480	7.6	28.5	6.1	78
28...	15.0	477	7.2	27.0	4.0	50

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
July										
28...	1.0	468	7.3	26.5	2.00	5	1.8	4.9	61	.6
28...	10.0	468	7.3	26.0	--	--	--	4.5	55	--
28...	20.0	468	7.3	25.5	--	--	--	4.5	55	--
28...	25.0	468	7.4	26.0	--	5	2.2	4.6	57	1.2

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.07 µm-MF (cols./100 mL)	Streptococci, fecal, Kf Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
July											
28...	160	K140	20	180	17	41	18	23	.8	3.2	160
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	180	17	41	18	23	.8	3.5	160

Table 19.--Chemical-quality survey of Lake Austin, July 28, 1981--Continued

301926097502201 SITE Cc--Continued

Date	Sulfate, dis-solved (mg/L)	Chlo-ride, dis-solved (mg/L)	Fluo-ride, dis-solved (mg/L)	Silica, dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, residue at 105 °C, sus-pended (mg/L)	Solids, vola-tile, sus-pended (mg/L)	Nitro-gen, nitrate, total (mg/L)	Nitro-gen, nitrite, total (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)	Nitro-gen, ammonia, total (mg/L)
July											
28...	20	40	.20	8.1	250	7	6	.63	<.000	.63	.630
28...	--	--	--	--	--	--	--	.61	<.000	.61	.500
28...	--	--	--	--	--	--	--	--	--	--	--
28...	19	42	.20	8.0	250	3	0	.19	.030	.22	.220

Date	Nitro-gen, organic, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Nitro-gen, total (mg/L)	Phos-phorus, total (mg/L)	Arsenic, dis-solved (μg/L)	Barium, dis-solved (μg/L)	Cadmium, dis-solved (μg/L)	Chro-mium, dis-solved (μg/L)	Copper, dis-solved (μg/L)	Iron, dis-solved (μg/L)	Lead, dis-solved (μg/L)
July											
28...	.10	.73	1.4	.020	2	60	<1	10	<10	<10	<10
28...	.12	.62	1.2	.010	--	--	--	--	--	30	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	.41	.63	.85	<.010	2	60	<1	10	<10	<10	<10

Date	Manga-nese, dis-solved (μg/)	Mercury, dis-solved (μg/L)	Sele-nium, dis-solved (μg/L)	Silver, dis-solved (μg/L)	Zinc, dis-solved (μg/L)	PCB, total (μg/L)	Naph-tha-lenes, poly-chlor., total (μg/L)	Aldrin, total (μg/L)	Chlor-dane, total (μg/L)	DDD, total (μg/L)	DDE, total (μg/L)
July											
28...	14	.7	1	0	<3	<.0	<.00	<.00	<.0	<.00	<.00
28...	10	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	16	<.0	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00

Date	DDT, total (μg/L)	Di-azinon, total (μg/L)	Di-eldrin, total (μg/L)	Endo-sulfan, total (μg/L)	Endrin, total (μg/L)	Ethion, total (μg/L)	Hepta-chlor, total (μg/L)	Hepta-chlor epoxide, total (μg/L)	Lindane, total (μg/L)	Mala-thion, total (μg/L)	Meth-oxy-chlor, total (μg/L)
July											
28...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl para-thion, total (μg/L)	Methyl tri-thion, total (μg/L)	Mirex, total (μg/L)	Para-thion, total (μg/L)	Per-thane, total (μg/L)	Tox-aphene, total (μg/L)	Tri-thion, total (μg/L)	2,4-D, total (μg/L)	2,4-DP, total (μg/L)	2,4,5-T, total (μg/L)	Silvex, total (μg/L)
July											
28...	<.00	<.00	<.00	<.00	<.0	0	<.00	.06	<.00	<.00	<.00
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	<.00	<.00	<.00	<.00	<.0	0	<.00	--	--	--	--

Table 19.--Chemical-quality survey of Lake Austin, July 28, 1981--Continued

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
July								
28...	1.0	464	7.3	25.5	2.60	4.7	57	.63
28...	10.0	464	7.3	25.0	--	4.4	53	--
28...	17.0	464	7.3	25.0	--	4.3	52	.20

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
July									
28...	<.000	.63	.510	.19	.70	1.3	.010	20	20
28...	--	--	--	--	--	--	--	--	--
28...	.030	.23	.180	.30	.48	.71	.020	30	10

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
July										
28...	1.0	464	7.2	24.0	2.60	5	.50	3.4	40	.4
28...	7.0	464	7.3	24.5	--	5	<.00	3.5	42	.5

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)
July											
28...	K10	<1	K3	170	24	40	18	22	.7	3.3	150
28...	--	--	--	170	24	40	18	22	.7	3.4	150

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue, at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
July											
28...	15	39	.20	7.9	240	7	7	.22	.030	.25	.150
28...	16	39	.20	7.8	240	5	5	.23	.030	.26	.160

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)
July											
28...	.46	.61	.86	<.010	2	60	<1	10	<10	<10	<10
28...	.40	.56	.82	<.010	1	60	<1	10	<10	<10	<10

Table 19.--Chemical-quality survey of Lake Austin, July 28, 1981--Continued

302314097544901 SITE Ec--Continued

Date	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silber, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
July											
28...	18	<.0	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00
28...	18	<.0	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methoxychlor, total (µg/L)
July											
29...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
28...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4-DP, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
July											
28...	<.00	<.00	<.00	<.00	<.0	0	<.00	.02	<.00	.01	<.00
28...	<.00	<.00	<.00	<.00	<.0	0	<.00	>.01	<.00	<.00	<.00

Table 20.--Chemical-quality survey of Lake Austin, February 16, 1982

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; K, non-ideal colony count; <, less than]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
16...	1.0	443	8.4	11.0	10.9	99
16...	10.0	443	8.4	10.5	10.8	97
16...	20.0	443	8.4	10.5	10.8	97
16...	30.0	443	8.4	10.5	10.8	97
16...	40.0	443	8.4	10.5	10.5	95
16...	52.0	443	8.4	10.5	10.1	91

301739097471201 SITE Ac

Date	Sam, pling depth (feet)	Specific conductance (µS/cm)	pH (standare units)	Temperature (°C)	Transparency (secchi disk) (m)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)
Feb											
16...	1.0	443	8.4	11.0	1.10	3.3	10.7	97	.9	K9	31
16...	10.0	443	8.4	11.0	--	--	10.7	97	--	--	--
16...	20.0	443	8.4	11.0	--	--	10.7	97	--	--	--
16...	33.0	443	8.4	10.5	--	3.6	10.5	95	.9	--	--

Date	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)
Feb												
16...	180	34	44	18	22	.7	3.4	150	30	38	.20	9.3
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	180	34	44	18	22	.7	3.4	150	29	38	.20	9.3

Date	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)
Feb												
16...	250	5	5	<.020	.23	<.060	.73	.96	.010	2	65	<1
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	<.020	.27	<.060	.99	1.3	.010	--	--	--
16...	250	7	5	<.020	.23	<.060	.76	.99	.010	2	68	<1

Table 20.--Chemical-quality survey of Lake Austin, February 16, 1982--Continued

301739097471201 SITE Ac--Continued

Date	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)	Atrazine, total (µg/L)
Feb												
16...	<10	7	<10	3	2	<.1	<1	<1	<3	<.00	<.00	<.00
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	30	--	<10	--	--	--	--	--	--	--
16...	<10	7	<10	5	6	<.1	<1	<1	<3	<.00	<.00	<.00

Date	Cyanazine, total (µg/L)	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Feb											
16...	<.00	<.00	<.0	<.0	<.0	<.00	<.0	<.00	<.00	<.00	<.0
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	<.00	<.00	<.0	<.0	<.0	<.00	<.0	<.00	<.00	<.00	<.0

301739097470901 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
16...	1.0	443	8.4	11.0	10.9	99
16...	10.0	443	8.4	11.0	10.8	98
16...	14.0	443	8.4	11.0	10.7	97

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrite, total (mg/L)
Feb								
16...	1.0	443	8.4	11.5	1.90	10.4	95	<.020
16...	10.0	443	8.4	11.5	--	10.4	95	--
16...	20.0	443	8.4	11.5	--	10.1	93	--
16...	27.0	443	8.3	12.0	--	10.0	93	<.020

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Feb								
16...	.26	<.060	--	1.0	1.3	.010	<10	10
16...	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--
16...	.21	.090	.91	1.0	1.2	.010	20	10

Table 20.--Chemical-quality survey of Lake Austin, February 16, 1982--Continued

302044097472301 SITE B1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
16...	1.0	443	8.5	12.0	10.7	99
16...	7.0	443	8.4	12.0	10.7	99

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci fecal, KF Agar (cols./ 100 mL)
Feb											
16...	1.0	440	8.3	12.0	2.60	3.7	10.0	93	.3	K3	K18
16...	10.0	440	8.3	11.5	--	--	10.0	92	--	--	--
16...	20.0	440	8.3	11.5	--	--	10.0	92	--	--	--
16...	24.0	440	8.3	12.0	--	2.5	9.9	92	.4	--	--

Date	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)
Feb												
16...	180	34	44	18	22	.7	3.8	150	28	39	.30	9.5
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	180	34	44	18	22	.7	3.8	150	28	42	.30	9.5

Date	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)
Feb												
16...	250	0	0	<.020	.21	<.070	--	.73	.94	.010	1	66
16...	--	--	--	<.020	.26	.060	.56	.62	.88	.010	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	260	6	1	<.020	.23	.060	.65	.71	.94	.010	2	66

Date	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)
Feb												
16...	<1	<10	3	<10	1	3	<.1	<1	<1	<3	<.00	<.00
16...	--	--	--	10	--	10	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	<1	<10	3	<10	5	3	<.1	<1	<1	<3	<.00	<.00

Table 20.--Chemical-quality survey of Lake Austin, February 16, 1982--Continued

301926097502201 SITE Cc--Continued

Date	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Feb												
16...	<.00	<.00	<.00	<.0	<.0	<.0	<.00	<.0	<.00	<.00	<.00	<.0
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	<.00	<.00	<.00	<.0	<.0	<.0	<.00	<.0	<.00	<.00	<.00	<.0

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrite, total (mg/L)
Feb								
16...	1.0	437	8.4	12.5	2.30	10.2	96	<.020
16...	10.0	437	8.4	12.0	--	10.1	94	--
16...	17.0	437	8.3	12.5	--	10.0	94	<.020

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Feb								
16...	.25	<.060	--	.78	1.0	.010	10	<10
16...	--	--	--	--	--	--	--	--
16...	.25	.070	.80	.87	1.1	.010	20	10

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 um-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)
Feb											
16...	1.0	435	8.6	12.5	1.40	5.0	11.3	107	.4	K3	K1
16...	5.0	435	8.5	13.0	--	3.1	11.3	108	.4	--	--

Date	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)
Feb												
16...	180	32	43	18	22	.7	3.8	150	27	39	.30	9.5
16...	180	32	43	18	22	.7	3.7	150	27	39	.20	9.4

Table 20.--Chemical-quality survey of Lake Austin, February 16, 1982--Continued

302314097544901 SITE Ec--Continued

Date	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (mg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)
Feb												
16...	250	0	0	<.020	.21	<.060	.57	.78	<.010	1	66	<1
16...	250	14	7	<.020	.22	<.060	.64	.86	<.010	2	64	<1

Date	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)	Atrazine, total (µg/L)
Feb												
16...	<10	2	<10	1	2	<.1	<1	<1	<3	<.00	<.00	<.00
16...	<10	2	<10	<1	1	<.1	<1	<1	<3	<.00	<.00	<.00

Date	Cyanazine, total (µg/L)	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Feb											
16...	<.00	<.00	<.0	<.0	<.0	<.00	<.0	<.00	<.00	<.00	<.0
16...	<.00	<.00	<.0	<.0	<.0	<.00	<.0	<.00	<.00	<.00	<.0

Table 21.--Chemical-quality survey of Lake Austin, August 19, 1982

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; µm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
19...	1.0	482	7.8	25.5	6.4	80
19...	10.0	480	7.6	22.5	4.3	51
19...	20.0	480	7.6	22.5	3.9	46
19...	30.0	480	7.5	22.0	3.7	43
19...	40.0	480	7.5	22.0	3.0	35
19...	48.0	480	7.5	21.5	2.1	24

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Aug										
19...	1.0	481	7.8	25.5	1.30	<1	3.1	6.4	80	<.0
19...	10.0	480	7.7	23.5	--	--	--	5.5	65	--
19...	20.0	480	7.6	22.5	--	--	--	3.9	46	--
19...	30.0	480	7.6	22.0	--	--	--	3.5	41	--
19...	38.0	480	7.6	22.0	--	10	60	3.2	37	.4

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Aug											
19...	K6	K6	180	32	43	18	23	.8	3.1	150	30
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	180	33	42	19	24	.8	3.1	150	29

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Aug										
19...	42	.20	8.5	260	11	6	--	<.020	.10	.060
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	<.020	.12	.120
19...	--	--	--	--	--	--	--	--	--	--
19...	43	.20	8.9	260	105	20	.10	.020	.12	.110

Table 21.--Chemical-quality survey of Lake Austin, August 19, 1982--Continued

301739097471201 SITE Ac--Continued

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (μg/L)	Barium, dissolved (μg/L)	Cadmium, dissolved (μg/L)	Chromium, dissolved (μg/L)	Copper, dissolved (μg/L)	Iron, dissolved (μg/L)
Aug										
19...	.84	.90	1.0	.030	1	66	<1	<10	1	4
19...	--	--	--	--	--	--	--	--	--	--
19...	.98	1.1	1.2	.020	--	--	--	--	--	30
19...	--	--	--	--	--	--	--	--	--	--
19...	1.6	1.7	1.8	.080	1	66	<1	<10	1	7

Date	Lead, dissolved (μg/L)	Manganese, dissolved (μg/L)	Mercury, dissolved (μg/L)	Selenium, dissolved (μg/L)	Silver, dissolved (μg/L)	Zinc, dissolved (μg/L)	Ametryne, total	Atratone, total (μg/L)	Atrazine, total (μg/L)	Cyanazine, total (μg/L)
Aug										
19...	2	1	<.1	<1	<1	<3	<.10	<.10	<.10	<.10
19...	--	--	--	--	--	--	--	--	--	--
19...	--	<10	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	<1	18	<.1	<1	<1	<3	<.10	<.10	<.10	<.10

Date	Cyprazine, total (μg/L)	Methomyl, total (μg/L)	Prometone, total (μg/L)	Prometryne, total (μg/L)	Propazine, total (μg/L)	Propham, total (μg/L)	Sevin, total (μg/L)	Simazine, total (μg/L)	Simetone, total (μg/L)	Simetryne, total (μg/L)
Aug										
19...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

301739097470901 SITE A1

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
19...	1.0	481	7.8	25.5	6.4	80
19...	10.0	480	7.6	22.5	3.9	46
19...	15.0	480	7.6	22.5	3.6	42

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrite, total (mg/L)
Aug								
19...	1.0	480	7.7	23.5	1.50	5.5	65	<.020
19...	10.0	480	7.7	22.5	--	4.5	53	--
19...	20.0	480	7.7	22.5	--	4.5	53	--
19...	27.0	480	7.7	22.5	--	4.3	51	<.020

Table 21.--Chemical-quality survey of Lake Austin, August 19, 1982--Continued

302043097472401 SITE Bc--Continued

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Aug								
19...	.10	.080	.52	.60	.70	.030	20	<10
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	.10	.180	1.7	1.9	2.0	.030	10	20

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Aug										
19...	1.0	482	7.6	22.0	2.00	5	2.0	4.2	49	.1
19...	10.0	482	7.6	22.0	--	--	--	4.1	48	--
19...	20.0	482	7.6	22.0	--	--	--	4.0	47	--
19...	28.0	482	7.6	22.0	--	<1	2.4	4.0	47	.2

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)
Aug										
19...	K5	K39	180	29	42	18	23	.8	3.0	150
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	180	29	42	18	23	.8	3.1	150

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Aug										
19...	31	43	.20	8.3	260	9	1	<.020	.10	.070
19...	--	--	--	--	--	--	--	<.020	.11	.100
19...	--	--	--	--	--	--	--	--	--	--
19...	30	43	.20	8.3	260	8	8	<.020	.12	.130

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Aug										
19...	.93	1.0	1.1	.020	1	65	<1	<10	1	<3
19...	1.1	1.2	1.3	.020	--	--	--	--	--	10
19...	--	--	--	--	--	--	--	--	--	--
19...	.87	1.0	1.1	.020	1	64	<1	<10	2	<3

Table 21.--Chemical-quality survey of Lake Austin, August 19, 1982--Continued

301926097502201 SITE Cc--Continued

Date	Lead, dis- solved (µg/L)	Manga- nese, dis- solved (µg/L)	Mercury, dis- solved (µg/L)	Sele- nium, dis- solved (µg/L)	Silver, dis- solved (µg/L)	Zinc, dis- solved (µg/L)	Ame- tryne, total	Atra- tone, total (µg/L)	Atra- zine, total (µg/L)	Cyan- azine, total (µg/L)
Aug										
19...	<1	7	<.1	<1	<1	<3	<.10	<.10	<.10	<.10
19...	--	10	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	<1	7	<.1	<1	<1	<3	<.10	<.10	<.10	<.10

Date	Cypra- zine, total (µg/L)	Metho- myl, total (µg/L)	Prome- tone, total (µg/L)	Prome- tryne, total (µg/L)	Pro- pazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Sima- zine, total (µg/L)	Sime- tone, total (µg/L)	Sime- tryne, total (µg/L)
Aug										
19...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

302021097540001 SITE Dc

Date	Sam- pling depth (feet)	Spe- cific con- duct- ance (µS/cm)	pH (stand- ard units)	Temper- ature (°C)	Trans- par- ency (secchi disk) (m)	Oxygen, dis- solved (mg/L)	Oxygen, dis- solved (per- cent satu- ration)	Nitro- gen, nitrite, total (mg/L)
Aug								
19...	1.0	479	7.6	21.0	2.80	2.7	31	<.020
19...	10.0	479	7.6	21.0	--	2.5	28	--
19...	14.0	479	7.6	21.0	--	2.5	28	<.020

Date	Nitro- gen, NO2+NO3, total (mg/L)	Nitro- gen, ammonia, total (mg/L)	Nitro- gen, organic, total (mg/L)	Nitro- gen, am- monia + organic, total (mg/L)	Nitro- gen, total (mg/L)	Phos- phorus, total (mg/L)	Iron, dis- solved (µg/L)	Manga- nese, dis- solved (µg/L)
Aug								
19...	.12	.130	.67	.80	.92	.020	20	20
19...	--	--	--	--	--	--	--	--
19...	.12	.120	.78	.90	1.0	.020	60	20

302314097544901 SITE Ec

Date	Sam- pling depth (feet)	Spe- cific con- duct- ance (µS/cm)	pH (stand- ard units)	Temper- ature (°C)	Trans- par- ency (secchi disk) (m)	Color (plat- inum- cobalt units)	Tur- bid- ity (NTU)	Oxygen, dis- solved (mg/L)	Oxygen, dis- solved (per- cent satu- ration)	Oxygen demand, bio- chem- ical, 5-day (mg/L)
Aug										
19...	1.0	483	7.6	20.5	1.80	<1	1.0	3.0	34	.2
19...	6.0	483	7.6	20.5	--	<1	1.7	2.9	33	.2

Table 21.--Chemical-quality survey of Lake Austin, August 19, 1982--Continued

302314097544901 SITE Ec--Continued

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Aug 19...	K4	K8	180	29	42	18	23	.8	3.1	150
19...	--	--	180	32	43	18	24	.8	3.2	150

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Aug 19...	30	43	.20	8.4	260	11	6	<.020	.14	.110
19...	30	43	.20	8.5	260	7	8	<.020	<.10	.090

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Aug 19...	.89	1.0	1.1	.030	1	65	<1	<10	1	<3
19...	.81	.90	--	.030	1	66	<1	<10	1	<3

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)	Atrazine, total (µg/L)	Cyanazine, total (µg/L)
Aug 19...	<1	23	<.1	<1	<1	<3	<.10	<.10	<.10	<.10
19...	1	22	<.1	1	<1	<3	<.10	<.10	<.10	<.10

Date	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Aug 19...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
19...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

Table 22.--Chemical-quality survey of Lake Austin, January 05, 1983

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity units; µm-MF, micrometer membrane filter cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
05...	1.0	527	8.0	10.5	9.9	89
05...	10.0	527	8.0	10.0	9.8	87
05...	20.0	527	8.0	10.0	9.6	85
05...	34.0	527	8.0	10.0	9.5	84

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Jan											
05...	1.0	527	8.0	10.0	1.90	<1	2.2	9.9	88	.8	K5
05...	10.0	527	8.0	10.0	--	--	--	9.8	87	--	--
05...	20.0	527	8.0	10.0	--	--	--	9.7	86	--	--
05...	30.0	527	8.0	10.0	--	--	--	9.7	85	--	--
05...	40.0	527	8.0	10.0	--	--	--	9.7	86	--	--
05...	50.0	527	8.0	10.0	--	--	--	9.7	85	--	--
05...	60.0	527	8.0	10.0	--	<1	4.2	9.7	86	.5	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Jan												
05...	23	200	50	47	20	30	1	3.5	150	37	54	.20
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	200	50	47	20	30	1	3.5	150	37	54	.20

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)
Jan												
05...	9.4	290	<1	<1	<.020	<.10	<.060	--	.50	<.010	1	71
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	<.020	<.10	.090	.51	.60	<.010	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	9.3	290	11	<1	<.020	<.10	<.060	--	.80	<.010	1	67

Table 22.--Chemical-quality survey of Lake Austin, January 05, 1983--Continued

301739097471201 SITE Ac--Continued

Date	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)
Jan												
05...	<1	<10	1	7	<1	1	<.1	<1	<1	<3	<.10	<.10
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	10	--	10	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	<1	<10	1	5	1	12	<.1	<1	<1	<3	<.10	<.10

Date	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L
Jan												
05...	<.10	<.10	<.10	<2.0	.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.10	<.10	<.10	<2.0	.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

301739097470901 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
05...	1.0	527	8.0	10.0	9.8	87
05...	10.0	527	8.0	10.0	9.7	86
05...	20.0	527	8.0	10.0	9.6	85

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan							
05...	1.0	523	8.1	10.0	1.70	9.8	87
05...	10.0	523	8.1	10.0	--	9.8	87
05...	20,0	523	8.1	10.0	--	9.7	86
05...	28.0	563	8.0	9.5	--	9.0	79

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Jan							
05...	<.020	<.10	<.060	.50	<.010	10	<10
05...	--	--	--	--	--	--	--
05...	<.020	<.10	<.060	.50	<.010	10	<10
05...	<.020	<.10	<.060	.60	<.010	10	10

Table 22.--Chemical-quality survey of Lake Austin, January 05, 1983--Continued

302044097472301 SITE B1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
05...	1.0	524	8.1	10.0	9.7	86
05...	11.0	524	8.1	10.0	9.7	86

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Jan											
05...	1.0	524	8.2	11.0	4.0	<1	.80	10.0	91	0.3	K1
05...	10.0	524	8.3	10.5	--	--	--	9.8	88	--	--
05...	20.0	524	8.3	10.5	--	--	--	9.8	88	--	--
05...	25.0	524	8.2	10.5	--	<1	.80	9.6	86	0.4	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Jan												
05...	<1	180	45	41	20	31	1	3.6	140	39	58	0.20
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	190	54	43	21	33	1	3.5	140	39	58	0.20

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)
Jan												
05...	6.9	280	<1	<1	<.020	<.10	.060	.54	.60	<.010	1	69
05...	--	--	--	--	<.020	<.10	<.060	--	.20	<.010	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	7.3	290	3	<1	<.020	<.10	.060	.44	.50	<.010	1	72

Date	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atrotone, total (µg/L)
Jan												
05...	<1	<10	1	<3	2	4	<.1	<1	<1	<3	<.10	<.10
05...	--	--	--	20	--	<10	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	<1	<10	1	4	<1	2	<.1	<1	<1	<3	<.10	<.10

Table 22.--Chemical-quality survey of Lake Austin, January 05, 1983--Continued

301926097502201 SITE Cc--Continued

Date	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Cypraaine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Jan												
05...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan							
05...	1.0	538	8.40	10.5	3.7	10.9	98
05...	10.0	538	8.40	10.0	--	10.6	94
05...	18.0	538	8.30	10.0	--	10.1	89

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Jan								
05...	<.020	<.100	<.060	--	.50	<.010	20	10
05...	--	--	--	--	--	--	--	--
05...	<.020	<.100	.070	.43	.50	.020	20	10

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Jan											
05...	1.0	555	8.2	12.5	2.10	<1	1.6	10.8	102	.6	K3
05...	9.0	552	8.4	11.0	--	<1	4.3	10.9	99	.7	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Jan												
05...	<1	190	54	43	21	34	1	3.9	140	42	64	.30
05...	--	200	61	44	22	35	1	3.7	140	44	66	.30

Table 22.--Chemical-quality survey of Lake Austin, January 05, 1983--Continued

302314097544901 SITE Ec--Continued

Date	Silica, dis- solved (mg/L)	Solids, sum of constit- uents, dis- solved (mg/L)	Solids, residue at 105 °C, sus- pended (mg/L)	Solids, vola- tile, sus- pended (mg/L)	Nitro- gen, nitrite, total (mg/L)	Nitro- gen, NO2+NO3, total (mg/L)	Nitro- gen, ammonia, total (mg/L)	Nitro- gen, am- monia + organic, total (mg/L)	Phos- phorus, total (mg/L)	Arsenic, dis- solved (µg/L)	Barium, dis- solved (µg/L)	Cadmium, dis- solved (µg/L)
Jan												
05...	6.3	300	3	<1	<.020	<.10	<.060	.60	<.010	1	77	<1
05...	6.5	310	6	<1	<.020	<.10	<.060	1.9	.050	1	79	<1

Date	Chro- mium, dis- solved (µg/L)	Copper, dis- solved (µg/L)	Iron, dis- solved (µg/L)	Lead, dis- solved (µg/L)	Manga- nese, dis- solved (µg/L)	Mercury, dis- solved (µg/L)	Sele- nium, dis- solved (µg/L)	Silver, dis- solved (µg/L)	Zinc, dis- solved (µg/L)	Ame- tryne, total	Atra- tone, total (µg/L)	Atra- zine, total (µg/L)
Jan												
05...	<10	1	<3	<1	1	<.1	<1	<1	<3	<.10	<.10	<.10
05...	<10	1	3	<1	5	<.1	<1	1	5	<.10	<.10	<.10

Date	Cyan- azine, total (µg/L)	Cypra- zine, total (µg/L)	Metho- myl, total (µg/L)	Prome- tone, total (µg/L)	Prome- tryne, total (µg/L)	Pro- pazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Sima- zine, total (µg/L)	Sime- tone, total (µg/L)	Sime- tryne, total (µg/L)
Jan											
05...	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
05...	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

Table 23.--Chemical-quality survey of Lake Austin, August 29, 1983

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity units; µm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
29...	1.0	575	7.9	28.0	7.8	101
29...	10.0	580	7.8	22.5	4.6	54
29...	20.0	580	7.8	22.0	3.8	44

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Aug										
29...	1.0	584	7.9	28.0	1.50	5	3.5	7.5	97	.8
29...	10.0	584	7.7	22.0	--	--	--	5.6	65	--
29...	20.0	584	7.7	21.5	--	--	--	4.9	56	--
29...	30.0	584	7.7	21.5	--	--	--	4.3	49	--
29...	40.0	584	7.7	21.0	--	--	--	4.3	49	--
29...	45.0	582	7.7	21.5	--	<1	8.5	3.8	44	.6

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Aug											
29...	30	28	210	58	47	22	35	1	4.2	150	40
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	210	58	47	22	36	1	4.4	150	48

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Aug										
29...	64	.20	8.2	310	8	7	--	<.020	<.10	.020
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	<.020	.10	.020
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	66	.20	7.9	320	23	14	.08	.020	.10	.110

Table 23.--Chemical-quality survey of Lake Austin, August 29, 1983--Continued

301739097471201 SITE Ac--Continued

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Aug										
29...	.28	.30	--	.010	1	76	<1	<10	2	4
29...	--	--	--	--	--	--	--	--	--	--
29...	.38	.40	.50	.010	--	--	--	--	--	20
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	.19	.30	.40	.020	1	79	<1	<10	2	8

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)	Atrazine, total (µg/L)	Cyanazine, total (µg/L)
Aug										
29...	<1	1	<.1	1	<1	4	<.10	<.10	<.10	<.10
29...	--	--	--	--	--	--	--	--	--	--
29...	--	10	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	<1	39	<.1	<1	<1	9	<.10	<.10	<.10	<.10

Date	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Aug										
29...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	..	..		..	--	--	--
29...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

301739097470901 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
29...	1.0	580	7.9	28.0	7.4	96
29...	12.0	580	7.7	25.5	4.1	51

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug							
29...	1.0	568	7.9	28.0	1.30	7.5	97
29...	10.0	584	8.0	21.5	--	6.5	74
29...	20.0	584	7.9	21.0	--	5.9	67
29...	29.0	584	8.0	21.0	--	5.3	60

Table 23.--Chemical-quality survey of Lake Austin, August 29, 1983--Continued

302043097472401 SITE Bc--Continued

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Aug								
29...	<.020	<.10	<.010	--	.30	.010	30	10
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
29...	<.020	<.10	.090	.31	.40	.010	20	20

302044097472301 SITE Bl

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
29...	1.0	570	7.9	28.0	7.6	98
29...	10.0	584	8.1	22.0	5.4	62

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Aug											
29...	1.0	572	7.9	26.5	1.50	<1	1.4	8.5	107	0.4	21
29...	10.0	584	7.9	20.5	--	--	--	6.4	72	--	--
29...	20.0	584	7.9	20.5	--	--	--	6.3	71	--	--
29...	28.0	584	8.1	20.5	--	<1	4.7	5.7	64	0.2	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Aug												
29...	79	200	53	45	22	36	1	3.7	150	41	64	0.20
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	210	56	46	22	36	1	3.8	150	42	67	0.20

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)
Aug												
29...	7.7	310	8	6	<.020	<.10	.020	.28	.30	.020	1	79
29...	--	--	--	--	<.020	<.10	.120	.18	.30	.010	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	7.4	310	10	2	<.020	<.10	.070	.53	.60	.030	1	80

Table 23.--Chemical-quality survey of Lake Austin, August 29, 1983--Continued

301926097502201 SITE Cc--Continued

Date	Cadmium, dis-solved (µg/L)	Chro-mium, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Sele-nium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	Ame-tryne, total	Atra-tone, total (µg/L)
Aug												
29...	<1	<10	2	<3	1	2	<.1	<1	<1	4	<.10	<.10
29...	--	--	--	20	--	20	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	<1	<10	2	6	1	12	<.1	<1	<1	6	<.10	<.10

Date	Atra-zine, total (µg/L)	Cyan-azine, total (µg/L)	Cypra-zine, total (µg/L)	Metho-myl, total (µg/L)	Prome-tone, total (µg/L)	Prome-tryne, total (µg/L)	Pro-pazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Sima-zine, total (µg/L)	Sime-tone, total (µg/L)	Sime-tryne, total (µg/L)
Aug												
29...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

302021097540001 SITE Dc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Trans-par-ency (secchi disk) (m)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)	Nitro-gen, nitrite, total (mg/L)
Aug								
29...	1.0	584	8.1	19.5	3.5	5.9	65	<.020
29...	10.0	583	8.1	19.5	--	5.6	62	--
29...	16.0	583	8.2	19.5	--	5.1	56	<.020

Date	Nitro-gen, NO2+NO3, total (mg/L)	Nitro-gen, ammonia, total (mg/L)	Nitro-gen, organic, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Nitro-gen, total (mg/L)	Phos-phorus, total (mg/L)	Iron, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)
Aug								
29...	.10	.080	.22	.30	.40	.010	20	10
29...	--	--	--	--	--	--	--	--
29...	<.10	.120	.18	.30	--	.010	40	20

302314097544901 SITE Ec

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Trans-par-ency (secchi disk) (m)	Color (plat-inum-cobalt units)	Tur-bid-ity (NTU)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)	Oxygen demand, bio-chem-ical, 5-day (mg/L)
Aug										
29...	1.0	584	7.80	18.0	2.40	<1	1.0	3.8	41	0.3
29...	8.0	584	7.90	18.0	--	<1	1.0	3.3	35	--

Table 23.--Chemical-quality survey of Lake Austin, August 29, 1983--Continued

302314097544901 SITE Ec--Continued

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)
Aug										
29...	K1	K5	210	62	47	23	37	1	4.4	150
29...	--	--	210	56	46	22	36	1	3.9	150

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissovled (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Aug										
29...	41	67	.20	7.5	320	7	<1	<.020	.10	.090
29...	38	66	.20	7.5	310	9	<1	<.020	.10	.030

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Aug										
29...	.21	.30	.40	.020	1	79	<1	<10	1	26
29...	.17	.20	.30	.010	1	80	<1	<10	2	14

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)	Atrazine, total (µg/L)	Cyanazine, total (µg/L)
Aug										
29...	<1	9	<.1	<1	<1	15	<.10	<.10	<.10	<.10
29...	3	6	<.1	<1	<1	21	<.10	<.10	<.10	<.10

Date	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Aug										
29...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
29...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

Table 24.--Chemical-quality survey of Lake Austin, March 06, 1984

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity units; µm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
06...	1.0	565	8.2	12.5	10.1	95
06...	10.0	565	8.2	12.5	10.1	95
06...	23.0	565	8.1	12.5	10.0	94

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Mar											
06...	1.0	565	8.2	12.5	1.10	<1	2.5	10.1	95	.6	K18
06...	10.0	565	8.2	12.5	--	--	--	10.0	94	--	--
06...	20.0	565	8.2	12.5	--	--	--	10.0	94	--	--
06...	30.0	565	8.2	12.5	--	--	--	10.1	95	--	--
06...	40.0	565	8.2	12.5	--	--	--	9.9	94	--	--
06...	52.0	565	8.1	12.5	--	<1	2.3	9.8	93	1.7	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO$_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Mar												
06...	45	210	55	48	23	32	1	3.8	160	42	59	.30
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	210	55	48	23	32	1	3.8	160	42	59	.30

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Mar											
06...	6.8	310	9	<2	<.010	<.10	.020	.18	.20	.010	<1
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	<.010	<.10	.030	.17	.20	.020	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	6.8	310	7	<2	<.010	<.10	.020	.18	.20	.010	<1

Table 24.--Chemical-quality survey of Lake Austin, March 06, 1984--Continued

301739097471201 SITE Ac--Continued

Date	Barium, dis-solved (μg/L)	Cadmium, dis-solved (μg/L)	Chro-mium, dis-solved (μg/L)	Copper, dis-solved (μg/L)	Iron, dis-solved (μg/L)	Lead, dis-solved (μg/L)	Manga-nese, dis-solved (μg/L)	Mercury, dis-solved (μg/L)	Sele-nium, dis-solved (μg/L)	Silver, dis-solved (μg/L)	Zinc, dis-solved (μg/L)
Mar											
06...	80	<1	30	<1	49	<1	8	<.1	<1	<1	<3
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	90	--	10	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	81	<1	20	4	59	<1	11	<.1	<1	<1	8

Date	Ame-tryne, total	Atra-zine, total (μg/L)	Cyan-azine, total (μg/L)	Metho-myl, total (μg/L)	Prome-tone, total (μg/L)	Prome-tryne, total (μg/L)	Pro-pazine, total (μg/L)	Propham, total (μg/L)	Sevin, total (μg/L)	Sima-zine, total (μg/L)	Sime-tryne, total (μg/L)
Mar											
06...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1

301739097470901 SITE A1

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (μS/cm)	pH (stand-ard units	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Mar						
06...	1.0	565	8.2	12.5	10.1	95
06...	10.0	565	8.2	12.5	10.1	95
06...	19.0	565	8.2	12.5	10.2	96

302043097472401 SITE Bc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (μS/cm)	pH (stand-ard units	Temper-ature (°C)	Trans-par-ency (secchi disk) (m)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Mar							
06...	1.0	561	8.2	13.5	1.10	10.1	98
06...	10.0	561	8.2	13.5	--	10.0	97
06...	20.0	561	8.2	13.5	--	10.0	97
06...	29.0	561	8.2	13.0	--	10.0	96

Date	Nitro-gen, nitrite, total (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)	Nitro-gen, ammonia, total (mg/L)	Nitro-gen, organic, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Phos-phorus, total (mg/L)	Iron, dis-solved (μg/L)	Manga-nese, dis-solved (μg/L)
Mar								
06...	<.010	<.10	.020	.28	.30	.010	40	<10
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	<.010	<.10	<.010	--	<.20	.010	40	<10

Table 24.--Chemical-quality survey of Lake Austin, March 06, 1984--Continued

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Mar											
06...	1.0	535	8.10	13.0	2.70	<1	1.4	9.7	93	.4	K10
06...	10.0	535	8.10	13.0	--	--	--	9.7	93	--	--
06...	20.0	535	8.10	13.0	--	--	--	9.7	93	--	--
06...	28.0	535	8.10	13.0	--	<1	1.4	9.6	92	.3	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Mar												
06...	23	200	48	43	22	32	1	3.7	150	37	58	.30
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	200	51	44	22	31	1	3.7	150	37	59	.30

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Mar											
06...	6.9	290	4	<2	<.010	<.10	.020	.18	.20	.010	<1
06...	--	--	--	--	<.010	<.10	.040	.16	.20	.010	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	6.9	290	4	<2	<.010	<.10	.020	.18	.20	.010	<1

Date	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)
Mar											
06...	73	<1	50	<1	<3	<1	2	<.1	<1	<1	8
06...	--	--	--	--	20	--	<10	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	74	<1	<10	<1	<3	<1	2	<.1	<1	<1	4

Date	Ametryne, total	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetryne, total (µg/L)
Mar											
06...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1

Table 24.--Chemical-quality survey of Lake Austin, March 06, 1984--Continued

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar							
06...	1.0	530	8.1	13.5	3.10	9.5	92
06...	10.0	530	8.1	13.0	--	9.5	91
06...	14.0	530	8.1	13.0	--	9.3	89

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar								
06...	<.010	<.10	.010	--	<.20	.010	30	20
06...	--	--	--	--	--	--	--	--
06...	<.010	<.10	.030	.17	.20	.010	30	10

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Mar											
06...	1.0	528	8.30	11.0	2.40	<1	1.4	11.0	101	.8	K6
06...	8.0	526	8.30	11.0	--	<1	3.6	10.5	96	1.7	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Mar												
06...	34	190	51	42	21	31	1	3.7	140	36	59	.30
06...	--	200	56	42	22	32	1	3.6	140	36	58	.30

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Mar											
06...	6.6	280	<2	<2	.010	<.10	.020	.18	.20	.010	<1
06...	6.8	280	11	<2	.010	<.10	.030	.27	.30	.020	<1

Table 24.--Chemical-quality survey of Lake Austin, March 06, 1984--Continued

302314097544901 SITE Ec--Continued

Date	Barium, dis-solved (µg/L)	Cadmium, dis-solved (µg/L)	Chro-mium, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Sele-nium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)
Mar											
06...	71	<1	30	<1	8	<1	3	<.1	<1	<1	9
06...	73	<1	30	<1	<3	<1	2	<.1	<1	<1	6

Date	Ame-tryne, total	Atra-zine, total (µg/L)	Cyan-azine, total (µg/L)	Metho-myl, total (µg/L)	Prome-tone, total (µg/L)	Prome-tryne, total (µg/L)	Pro-pazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Sima-zine, total (µg/L)	Sime-tryne, total (µg/L)
Mar											
06...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1
06...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1

Table 25.--Chemical-quality survey of Lake Austin, August 17, 1984

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; µm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; K, non-ideal colony count; <, less than]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
17...	1.0	538	8.0	27.5	6.8	87
17...	10.0	538	8.0	27.0	6.7	85
17...	18.0	538	7.8	26.0	4.7	59

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Aug											
17...	1.0	538	8.0	27.0	2.10	4	.60	6.8	86	.6	46
17...	10.0	538	8.0	27.0	--	--	--	6.8	86	--	--
17...	20.0	538	7.8	26.0	--	--	--	5.0	62	--	--
17...	30.0	538	7.7	25.5	--	--	--	4.7	58	--	--
17...	40.0	538	7.7	25.5	--	--	--	4.3	53	--	--
17...	46.0	538	7.7	25.5	--	30	27	4.1	51	1.6	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissovled (mg/L)
Aug												
17...	K4	200	51	44	22	32	1	3.8	150	32	59	.30
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	200	48	43	22	31	1	3.9	150	36	60	.20

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Aug											
17...	5.5	290	3	2	<.010	<.100	.020	.28	.30	<.010	1
17...	--	--	--	--	<.010	<.100	.030	.37	.40	<.010	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	<.010	<.100	.030	.37	.40	<.010	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	5.6	290	52	15	<.010	<.100	.040	.36	.40	<.010	1

Table 25.--Chemical-quality survey of Lake Austin, August 17, 1984--Continued

301739097471201 SITE Ac--Continued

Date	Barium, dis-solved (µg/L)	Cadmium, dis-solved (µg/L)	Chro-mium, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Sele-nium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)
Aug											
17...	74	<1	<10	2	4	4	1	<.1	<1	<1	<3
17...	--	--	--	--	10	--	<10	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	10	--	<10	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	74	<1	<10	1	<3	<1	21	<.1	<1	<1	<3

Date	Ame-tryne, total	Atra-zine, total (µg/L)	Cyan-azine, total (µg/L)	Metho-myl, total (µg/L)	Prome-tone, total (µg/L)	Prome-tryne, total (µg/L)	Pro-pazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Sima-zine, total (µg/L)	Sime-tryne, total (µg/L)
Aug											
17...	<.10	<.10	<.10	<2.0	<.4	<.1	<.10	<2.0	<2.0	<.10	<.1
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	<.10	<.10	<.10	<2.0	<.3	<.1	<.10	<2.0	<2.0	<.10	<.1

301739097470901 SITE A1

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Aug						
17...	1.0	538	8.0	27.5	6.6	84
17...	10.0	538	8.0	27.0	6.4	81
17...	16.0	538	7.9	26.5	5.4	68

302043097472401 SITE Bc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Trans-par-ency (secchi disk) (m)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)	Silica, dis-solved (mg/L)
Aug								
17...	1.0	536	8.1	28.0	2.60	7.2	93	5.4
17...	10.0	536	8.0	27.5	--	6.7	86	--
17...	20.0	541	7.8	26.0	--	4.9	61	--
17...	27.0	541	7.7	26.0	--	4.4	55	--

Date	Nitro-gen, nitrite, total (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)	Nitro-gen, ammonia, total (mg/L)	Nitro-gen, organic, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Phos-phorus, total (mg/L)	Iron, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)
Aug								
17...	<.010	<.100	.030	.37	.40	<.010	5	<1
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	<.010	<.100	<.010	--	.40	.010	<10	<10

Table 25.--Chemical-quality survey of Lake Austin, August 17, 1984--Continued

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Aug											
17...	1.0	540	8.0	26.5	2.60	5	.50	6.2	78	.7	60
17...	10.0	539	7.9	26.0	--	--	--	5.7	71	--	--
17...	20.0	539	7.8	25.5	--	--	--	4.8	59	--	--
17...	30.0	539	7.8	25.5	--	6	12	4.5	56	.6	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hard ness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalihity, field (mg/L CaCO$_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Aug												
17...	K9	200	55	44	23	32	1	3.7	150	36	59	.30
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	200	48	43	22	32	1	3.7	150	38	59	.30

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Aug											
17...	5.2	290	6	3	<.010	<.100	.030	.17	.20	<.010	<1
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	<.010	<.100	.030	.27	.30	<.010	--
17...	5.3	290	40	14	<.010	<.100	.030	.27	.30	<.010	<1

Date	Barium, dissolved (µg/L)	Cadmium dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)
Aug											
17...	75	<1	<10	2	7	8	5	<.1	<1	<1	<3
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	<10	--	<10	--	--	--	--
17...	75	<1	<10	1	<3	<1	7	<.1	<1	<1	12

Date	Ametryne, total	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetryne, total (µg/L)
Aug											
17...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1

Table 25.--Chemical-quality survey of Lake Austin, August 17, 1984--Continued

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug							
17...	1.0	540	7.9	25.5	3.7	4.8	59
17...	10.0	540	7.8	25.5	--	4.5	56
17...	17.0	540	7.8	25.5	--	4.2	52

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Aug								
17...	<.010	<.100	.030	.27	.30	<.010	10	<10
17...	--	--	--	--	--	--	--	--
17...	<.010	<.100	.050	.25	.30	<.010	20	40

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Aug											
17...	1.0	540	7.6	25.0	2.10	4	.90	2.8	34	1.3	51
17...	7.0	540	7.6	24.5	--	4	.90	2.4	29	.9	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Aug												
17...	<1	200	51	44	22	33	1	3.9	150	35	60	.20
17...	--	200	48	43	22	32	1	3.9	150	35	60	.20

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Aug											
17...	4.5	290	<1	<1	<.010	<.100	.060	.24	.30	<.010	<1
17...	4.6	290	<1	<1	<.010	<.100	.060	.34	.40	<.010	<1

Date	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)
Aug											
17...	75	<1	<10	1	6	1	23	<.1	<1	<1	7
17...	74	<1	<10	1	14	4	24	<.1	<1	<1	<3

Table 25.--Chemical-quality survey of Lake Austin, August 17, 1984--Continued

302314097544901 SITE Ec--Continued

Date	Ame-tryne, total	Atra-zine, total (µg/L)	Cyan-azine, total (µg/L)	Metho-myl, total (µg/L)	Prome-tone, total (µg/L)	Prome-tryne, total (µg/L)	Pro-pazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Sima-zine, total (µg/L)	Sime-tryne, total (µg/L)
Aug											
17...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1
17...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1

Table 26.--Chemical-quality survey of Lake Austin, October 10, 1984

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; µm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; K, non-ideal colony count; <, less than]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
10...	1.0	582	8.2	24.0	7.0	84
10...	10.0	584	8.2	24.0	6.9	83
10...	20.0	585	8.1	23.5	6.7	80

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Oct											
10...	1.0	581	8.2	24.0	2.40	7	2.0	7.3	88	.6	180
10...	10.0	581	8.2	23.5	--	--	--	7.2	85	--	--
10...	20.0	581	8.1	23.5	--	--	--	7.0	83	--	--
10...	30.0	582	8.0	23.0	--	--	--	6.1	72	--	--
10...	40.0	593	7.9	23.0	--	--	--	4.9	58	--	--
10...	53.0	595	7.8	22.5	--	25	7.1	4.9	57	.7	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Oct												
10...	K23	200	60	42	23	38	1	4.2	140	44	73	.30
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	200	64	42	24	38	1	4.4	140	47	73	.30

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct												
10...	5.5	310	<1	<1	<.010	<.10	<.010	--	.20	.010	8	<1
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	<.010	<.10	.010	.19	.20	.010	20	10
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	7.1	320	9	6	<.010	<.10	.120	.38	.50	.020	95	110

Table 26.--Chemical-quality survey of Lake Austin, October 10, 1984--Continued

301739097470901 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
10...	1.0	580	8.2	24.0	7.9	95
10...	13.0	580	8.2	23.5	7.1	84

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct							
10...	1.0	578	8.2	24.5	2.40	6.9	84
10...	10.0	578	6.2	24.0	--	6.6	79
10...	20.0	578	8.1	23.5	--	6.1	73
10...	27.0	578	7.9	23.5	--	5.0	59

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct								
10...	<.010	<.10	.010	.29	.30	.010	70	10
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	<.010	<.10	.040	.26	.30	.010	30	20

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Oct											
10...	1.0	580	8.2	25.0	2.40	5	1.6	6.4	78	.3	K18
10...	10.0	580	8.1	24.5	--	--	--	6.3	76	--	--
10...	20.0	593	7.8	23.0	--	--	--	4.2	50	--	--
10...	29.0	593	7.7	23.0	--	35	15	3.4	40	.2	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO$_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Oct												
10...	K6	200	60	42	23	39	1	4.1	140	45	70	.30
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	200	60	42	23	39	1	4.1	140	43	71	.30

Table 26.--Chemical-quality survey of Lake Austin, October 10, 1984--Continued

301926097502201 SITE Cc--Continued

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct												
10...	5.3	310	<1	<1	<.010	<.10	<.010	--	<.20	.010	4	<1
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	<.010	<.10	.050	.25	.30	.010	10	20
10...	6.2	310	18	5	<.010	<.10	.110	.39	.50	.020	8	4

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct							
10...	1.0	584	8.1	25.0	2.50	5.8	71
10...	12.0	586	8.1	24.5	--	5.6	68

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct								
10...	<.010	<.10	.020	.18	.20	.010	10	10
10...	<.010	<.10	.020	.28	.30	.010	70	20

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)
Oct											
10...	1.0	593	8.0	24.5	2.00	8	1.5	5.0	61	.3	K9
10...	8.0	591	8.0	24.0	--	7	2.0	5.1	61	.5	--

Date	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Oct												
10...	K12	200	62	43	23	38	1	4.2	140	41	73	.30
10...	--	200	60	42	23	39	1	4.3	140	48	72	.30

Table 26.--Chemical-quality survey of Lake Austin, October 10, 1984--Continued

302314097544901 SITE Ec--Continued

Date	Silica, dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, residue at 105 °C, sus-pended (mg/L)	Solids, vola-tile, sus-pended (mg/L)	Nitro-gen, nitrite, total (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)	Nitro-gen, ammonia, total (mg/L)	Nitro-gen, organic, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Phos-phorus, total (mg/L)	Iron, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)
Oct												
10...	4.6	310	2	1	<.010	<.10	.050	.55	.60	.010	23	42
10...	4.7	320	<1	<1	<.010	<.10	.040	.16	.20	.010	29	64

Table 27.--Chemical-quality survey of Lake Austin, October 24, 1984

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; µm-MF, micrometer membrane filter cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined, <, less than]

301739097471601 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
24...	1.0	525	7.6	20.0	6.9	77
24...	10.0	525	7.7	20.0	6.9	77
24...	17.0	525	7.8	20.0	6.9	77

301739097471201 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct									
24...	1.0	527	7.9	20.0	.90	30	7.5	7.0	78
24...	10.0	527	7.8	20.0	--	--	--	7.1	79
24...	20.0	527	7.8	20.0	--	--	--	7.1	79
24...	30.0	529	7.7	20.0	--	--	--	7.2	80
24...	40.0	529	7.7	20.0	--	--	--	7.2	80
24...	50.0	529	7.8	20.0	--	--	--	7.2	80
24...	55.0	530	7.4	20.0	--	55	20	7.2	80

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Oct										
24...	.9	92	340	200	57	46	20	31	1	4.0
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	1.1	--	--	210	50	51	20	28	.9	4.1

Date	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
Oct									
24...	140	43	57	.20	6.3	290	13	1	.29
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	.29
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	160	45	53	.20	10	310	8	4	.39

Table 27.--Chemical-quality survey of Lake Austin, October 24, 1984--Continued

301739097471201 SITE Ac--Continued

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct									
24...	.010	.30	.050	.75	.80	1.1	.020	6	2
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	.010	.30	.070	.53	.60	.90	.020	90	30
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	.010	.40	.070	.13	.20	.60	.030	200	73

301739097470901 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
24...	1.0	522	7.6	20.0	6.9	77
24...	10.0	522	7.7	20.0	6.9	77
24...	18.0	522	7.6	20.0	6.8	76

302043097472401 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
Oct								
24...	1.0	500	7.9	20.0	.70	6.5	72	.29
24...	10.0	500	7.9	20.0	--	6.6	74	--
24...	20.0	507	7.8	19.5	--	6.5	72	--
24...	28.0	550	7.9	18.5	--	7.1	77	.89

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct									
24...	.010	.30	.050	.55	.60	.90	.030	100	<10
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	.010	.90	.060	.74	.80	1.7	.040	60	10

Table 27.--Chemical-quality survey of Lake Austin, October 24, 1984--Continued

301926097502201 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen dissolved (percent saturation)
Oct									
24...	1.0	488	7.7	20.5	.70	35	9.3	5.9	66
24...	10.0	487	7.8	20.5	--	--	--	5.9	66
24...	20.0	486	7.8	20.5	--	--	--	5.9	66
24...	29.0	497	7.8	20.0	--	60	30	6.0	67

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Oct										
24...	.1	600	310	190	56	43	19	28	.9	3.9
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	1.1	--	--	200	51	49	19	25	.8	3.8

Date	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
Oct									
24...	130	35	53	.20	8.0	270	3	1	.19
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	.19
24...	150	32	47	.20	11	280	13	3	--

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct									
24...	.010	.20	.050	.45	.50	.70	.020	7	<1
24...	--	--	--	--	--	--	--	--	--
24...	.010	.20	.050	.15	.20	.40	.020	60	<10
24...	<.010	.20	.040	.16	.20	.40	.020	7	9

302021097540001 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Nitrogen, nitrate, total (mg/L)
Oct								
24...	1.0	472	7.6	19.5	.60	5.0	55	--
24...	10.0	480	7.6	19.5	--	5.0	55	--
24...	14.0	510	7.6	19.5	--	5.0	55	.19

Table 27.--Chemical-quality survey of Lake Austin, October 24, 1984--Continued

302021097540001 SITE Dc--Continued

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct									
24...	<.010	.20	.040	.26	.30	.50	.020	50	<10
24...	--	--	--	--	--	--	--	--	--
24...	.010	.20	.050	.75	.80	1.0	.020	70	10

302314097544901 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct									
24...	1.0	463	7.8	17.0	.40	60	19	6.1	64
24...	7.0	474	7.8	17.0	--	55	20	6.0	63

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Oct										
24...	1.2	200	190	180	46	44	16	26	.9	3.7
24...	1.2	--	--	180	56	44	16	26	.9	3.8

Date	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
Oct									
24...	130	35	46	.20	6.0	250	15	3	.28
24...	120	36	48	.20	6.2	250	4	1	.18

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct									
24...	.020	.30	.050	.45	.50	.80	.020	13	5
24...	.020	.20	.060	--	<.20	--	.020	8	3

Table 28.--Chemical-quality survey of Town Lake, February 03, 1975

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; ND, not detected]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
03...	1.0	481	7.9	13.5	9.9	94
03...	10.0	481	7.9	13.5	9.9	94
03...	19.0	481	7.9	13.5	9.8	93

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Feb											
03...	1.0	481	7.8	13.5	.67	10	10	9.8	93	.3	1,200
03...	5.0	481	7.8	13.5	--	--	--	9.8	93	--	--
03...	10.0	481	7.8	13.5	--	--	--	9.7	92	--	--
03...	15.0	481	7.8	13.5	--	--	--	9.6	91	--	--
03...	20.0	481	7.8	13.5	--	--	--	9.8	93	--	--
03...	27.0	481	7.8	13.5	--	10	10	9.7	92	.3	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium, adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)
Feb												
03...	460	1,500	190	33	45	18	23	.8	2.9	188	154	31
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	200	36	50	18	24	.8	3.2	200	164	31

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Chromium, dissolved (µg/L)	Cobalt, dissolved (µg/L)
Feb												
03...	43	.20	8.1	260	13	2	.38	.010	.020	1	ND	<2
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	.39	.020	.030	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	43	.20	8.1	280	17	2	.37	.010	.030	1	ND	2

Table 28.--Chemical-quality survey of Town Lake, February 03, 1975--Continued

301500097424801 SITE Ac--Continued

Date	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)
Feb												
03...	5	10	3	0	<.5	<20	<.0	<.00	<.0	<.00	<.00	<.00
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	10	--	0	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	4	10	2	0	<.5	<20	<.0	<.00	<.0	.01	.01	<.00

Date	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endrin, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)	Lindane, total (µg/L)	Mala-thion, total (µg/L)	Methyl para-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Feb											
03...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
03...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

301503097424701 SITE Al

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Feb						
03...	1.0	481	7.9	13.5	9.9	94
03...	10.0	481	7.9	13.5	9.8	93
03...	20.0	481	7.9	13.5	9.8	93

301500097440801 SITE Br

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Feb						
03...	1.0	488	8.0	13.0	9.9	93
03...	10.0	488	8.0	13.0	9.9	93
03...	14.0	488	8.0	13.0	9.9	93

301504097440901 SITE Bc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Feb						
03...	1.0	488	8.0	13.0	10.0	94
03...	10.0	488	8.0	13.0	9.9	93
03...	18.0	488	8.0	13.0	9.9	93

Table 28.--Chemical-quality survey of Town Lake, February 03, 1975--Continued

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
03...	1.0	490	8.1	13.0	9.8	92
03...	12.0	490	8.1	13.0	10.0	94

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
03...	1.0	490	8.1	13.0	10.0	94
03...	10.0	490	8.1	13.0	10.0	94
03...	17.0	490	8.0	13.0	10.0	94

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
03...	1.0	465	7.9	13.5	10.3	98
03...	10.0	465	8.0	13.5	10.2	97
03...	13.0	465	7.9	13.5	10.2	97

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Feb											
03...	1.0	488	8.3	13.0	.61	10	6.0	10.0	94	.2	180
03...	10.0	485	8.3	13.0	--	--	--	9.8	92	--	--
03...	16.0	483	8.3	13.0	--	5	7.0	9.8	92	.4	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium, adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Feb												
03...	120	100	190	30	45	19	26	.8	3.6	196	161	32
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	190	30	45	19	26	.8	3.3	196	161	31

Table 28.--Chemical-quality survey of Town Lake, February 03, 1975--Continued

301558097452201 SITE Dc--Continued

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Chromium, dissolved (µg/L)
Feb												
03...	47	.20	8.2	280	11	1	.31	.020	.49	.010	1	ND
03...	--	--	--	--	--	--	.35	.010	--	.010	--	--
03...	47	.20	8.2	280	11	1	.36	.010	.27	.020	1	20

Date	Cobalt, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Feb												
03...	<2	5	<10	<2	<10	<.5	30	<.0	<.00	<.0	<.00	<.00
03...	--	--	<10	--	<10	--	--	--	--	--	--	--
03...	<2	8	50	5	<10	<.5	30	<.0	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Feb												
03...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Feb											
03...	1.0	489	8.0	12.5	.79	5	7.0	10.2	95	.3	170
03...	12.0	487	7.9	12.5	--	10	6.0	10.2	95	.2	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L	Sodium, adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Feb												
03...	60	140	180	33	43	18	26	.9	3.4	182	149	32
03...	--	--	190	37	45	19	25	.8	3.8	188	154	31

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Chromium, dissolved (µg/L)
Feb												
03...	48	.20	8.3	270	10	0	.36	.020	.34	.020	1	ND
03...	47	.20	8.3	270	10	2	.36	.010	.27	.010	1	<20

Table 28.--Chemical-quality survey of Town Lake, February 03, 1975--Continued

301712097470701 SITE Ec--Continued

Date	Cobalt, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Feb												
03...	<2	5	20	<2	<10	<.5	<20	<.0	<.00	<.0	<.00	<.00
03...	<2	4	30	<2	20	<.5	20	<.0	<.00	<.0	<.00	<.00

Table 29.--Chemical-quality survey of Town Lake, June 12, 1975

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meter; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
June						
12...	1.0	480	7.5	22.5	6.9	78
12...	5.0	480	7.5	22.0	6.9	78
12...	10.0	480	7.5	22.0	6.8	77
12...	15.0	480	7.5	22.0	6.8	77
12...	20.0	480	7.5	22.0	6.8	77
12...	29.0	480	7.5	22.0	6.8	77

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
June											
12...	1.0	485	7.5	22.5	.61	0	15	6.8	77	.6	600
12...	5.0	485	7.5	22.0	--	--	--	6.8	77	--	--
12...	10.0	485	7.5	22.0	--	--	--	6.8	77	--	--
12...	15.0	485	7.5	22.0	--	--	--	6.7	76	--	--
12...	20.0	485	7.5	22.0	--	--	--	6.7	76	--	--
12...	26.0	485	7.5	22.0	--	0	20	6.7	76	.8	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)
June												
12...	290	700	190	27	50	17	22	.7	3.2	205	168	27
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	200	32	50	18	22	.7	3.2	204	167	27

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
June											
12...	37	.20	8.0	270	17	3	.28	.010	.020	40	<10
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	.29	.010	.020	50	<10
12...	--	--	--	--	--	--	--	--	--	--	--
12...	37	.20	8.1	270	23	3	.29	.010	.020	90	<10

Table 29.--Chemical-quality survey of Town Lake, June 12, 1975--Continued

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
June						
12...	1.0	485	7.4	22.0	6.7	76
12...	5.0	485	7.4	22.0	6.7	76
12...	10.0	485	7.5	22.0	6.7	76
12...	17.0	490	7.5	22.0	6.7	76

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
June						
12...	1.0	505	7.6	22.0	6.9	78
12...	5.0	505	7.6	21.5	6.9	78
12...	10.0	505	7.6	21.5	6.9	78
12...	15.0	505	7.6	21.5	6.9	78

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
June						
12...	1.0	505	7.6	21.5	6.9	78
12...	5.0	505	7.7	21.5	6.9	78
12...	10.0	505	7.7	21.5	6.9	78
12...	15.0	505	7.7	21.5	7.0	79
12...	21.0	510	7.7	2.5	7.0	79

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Teperaure (C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
June						
12...	1.0	515	7.7	2.5	7.3	82
12...	5.0	515	7.7	2.5	7.3	82
12...	13.0	515	7.8	2.5	7.2	81

Table 29.--Chemical-quality survey of Town Lake, June 12, 1975--Continued

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
June						
12...	1.0	515	7.7	21.5	7.0	79
12...	5.0	515	7.6	21.5	7.0	79
12...	10.0	515	7.7	21.5	7.0	79
12...	14.0	515	7.7	21.5	6.9	78

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
June						
12...	1.0	520	7.6	22.0	7.3	82
12...	10.0	520	7.6	22.0	7.3	83
12...	19.0	520	7.7	22.0	7.5	85

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
June											
12...	1.0	519	7.7	22.0	.58	0	10	7.1	81	.4	300
12...	5.0	515	7.7	21.5	--	--	--	7.0	79	--	--
12...	10.0	510	7.7	21.5	--	--	--	6.9	78	--	--
12...	15.0	508	7.7	21.5	--	5	15	7.4	83	.6	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
June												
12...	140	260	220	34	60	18	19	.6	2.7	232	190	28
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	200	34	50	19	26	.8	3.4	206	169	30

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
June												
12...	36	.20	8.6	290	13	1	.32	<.010	.43	.020	<10	<10
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	.29	<.010	--	.020	20	<10
12...	42	.20	8.3	280	17	2	.30	<.010	.38	.020	20	<10

Table 29.--Chemical-quality survey of Town Lake, June 12, 1975--Continued

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
June											
12...	1.0	534	7.8	21.5	.52	5	35	6.1	69	.6	320
12...	5.0	530	7.8	21.5	--	--	--	6.2	70	--	--
12...	10.0	526	7.8	21.5	--	5	15	6.2	70	.6	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
June												
12...	84	230	200	31	48	20	28	.9	3.5	208	171	31
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	200	39	49	20	27	.8	3.5	202	166	31

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
June												
12...	44	.20	8.3	290	61	10	.30	.020	.53	.020	150	<10
12...	--	--	--	--	--	--	.29	<.010	--	.020	<10	<10
12...	45	.20	8.3	280	12	3	.30	<.010	.53	.020	30	<10

Table 30.--Chemical-quality survey of Town Lake, August 12, 1976

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; ND, not detected]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
12...	1.0	537	7.5	29.5	5.8	75
12...	10.0	537	7.3	27.5	5.4	68
12...	15.0	537	7.2	27.5	4.9	61
12...	20.0	537	7.2	27.5	4.4	55

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Aug											
12...	1.0	537	7.4	31.0	1.60	0	3.0	5.8	77	.6	1,500
12...	10.0	537	7.3	27.5	--	--	--	5.7	71	--	--
12...	15.0	537	7.3	27.0	--	--	--	5.0	67	--	--
12...	20.0	537	7.2	27.0	--	--	--	4.4	54	--	--
12...	26.0	537	7.2	27.0	--	0	5.0	4.2	52	.4	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO$_3$)	Sulfate, dissolved (mg/L)
Aug												
12...	72	8	200	31	51	18	26	.8	3.6	208	171	31
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	200	41	50	19	26	.8	3.7	199	163	30

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)	Arsenic dissolved (µg/L)	Chromium, dissolved (µg/L)	Cobalt, dissolved (µg/L)
Aug												
12...	46	.20	10	290	4	2	.37	<.010	<.010	1	ND	ND
12...	--	--	--	--	--	--	.35	<.010	<.010	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	.39	.010	<.010	--	--	--
12...	47	.20	10	280	8	4	.36	.010	<.010	1	<20	ND

Table 30.--Chemical-quality survey of Town Lake, August 12, 1975--Continued

301500097424801 SITE Ac--Continued

Date	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)
Aug												
12...	9	<10	<2	<10	<.5	40	<.0	<.00	<.0	<.00	<.00	<.00
12...	--	20	--	<10	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	<10	--	40	--	--	--	--	--	--	--	--
12...	9	20	3	40	<.5	70	<.0	<.00	<.0	<.00	<.00	<.00

Date	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Aug											
12...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.28	<.00	<.00
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.18	<.00	<.00

301503097424701 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
12...	1.0	537	7.4	30.5	5.9	78
12...	10.0	537	7.3	27.5	5.9	74
12...	16.0	537	7.2	27.5	5.9	74

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
12...	1.0	535	7.5	28.0	6.4	81
12...	5.0	535	7.4	27.0	6.1	75
12...	11.0	535	7.3	27.0	5.3	65

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
12...	1.0	537	7.6	28.0	6.4	81
12...	5.0	537	7.5	27.0	6.0	74
12...	10.0	537	7.4	27.0	5.7	70
12...	19.0	537	7.4	27.0	5.7	70

Table 30.--Chemical-quality survey of Town Lake, August 12, 1975--Continued

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
12...	1.0	536	7.3	26.5	6.2	76
12...	7.0	536	7.1	26.0	6.1	74

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
12...	1.0	536	7.2	29.0	6.3	81
12...	10.0	536	7.1	26.0	6.1	74
12...	14.0	536	7.1	26.0	6.1	74

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
12...	1.0	524	7.5	27.0	5.7	70
12...	10.0	524	7.4	26.5	5.7	70
12...	16.0	540	7.1	26.0	5.8	71

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Aug											
12...	1.0	526	7.5	27.0	1.50	0	3.0	5.5	68	.7	160
12...	10.0	526	7.4	26.5	--	--	--	5.6	68	--	--
12...	15.0	526	7.2	26.0	--	--	--	5.7	70	--	--
12...	20.0	574	7.0	25.0	--	0	3.0	5.9	70	.2	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Aug												
12...	69	26	190	39	48	18	27	.9	3.8	190	156	31
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	240	29	63	20	22	.6	2.6	258	212	27

Table 30.--Chemical-quality survey of Town Lake, August 12, 1975--Continued

301558097452201 SITE Dc--Continued

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Chromium, dissolved (µg/L)
Aug 12...	49	.20	9.8	280	6	5	.27	<.010	.32	<.010	1	<20
12...	--	--	--	--	--	--	.35	<.010	--	<.010	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	38	.20	10	310	4	2	.82	<.010	.34	<.010	1	<20

Date	Cobalt, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Aug 12...	ND	4	<10	2	<10	<.5	20	<.0	<.00	<.0	<.00	<.00
12...	--	--	<10	--	<10	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	ND	6	20	2	<10	<.5	50	<.0	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Aug 12...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.36	<.00	<.00
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.19	<.00	<.00

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Aug 12...	1.0	526	7.5	26.0	.91	0	6.0	4.8	59	.8	28
12...	10.0	526	7.5	26.0	--	--	--	4.8	59	--	--
12...	16.0	526	7.5	26.0	--	0	6.0	4.7	57	.9	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)
Aug 12...	6	4	190	38	46	18	27	.9	3.3	185	152	33
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	190	37	46	18	27	.9	3.5	186	153	33

Table 30.--Chemical-quality survey of Town Lake, August 12, 1975--Continued

301712097470701 SITE Ec--Continued

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic dissolved (µg/L)	Chromium, dissolved (µg/L)
Aug												
12...	49	.20	9.8	280	10	7	.25	<.010	.46	<.010	<1	--
12...	--	--	--	--	--	--	.24	<.010	--	.020	--	--
12...	49	.20	9.8	280	9	4	.25	<.010	.30	<.010	1	<20

Date	Cobalt, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Aug												
12...	2	4	20	2	--	<.5	--	<.0	<.00	<.0	<.00	<.00
12...	--	--	20	--	<10	--	--	--	--	--	--	--
12...	ND	4	20	<2	<10	<.5	20	<.0	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Aug												
12...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.13	<.00	<.00
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.13	<.00	<.00

Table 31.--Chemical-quality survey of Town Lake, January 06, 1976

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; ND, not detected; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
06...	1.0	582	7.7	18.0	8.6	91
06...	10.0	582	7.6	16.0	8.4	84
06...	15.0	582	7.6	17.5	8.7	91
06...	22.0	582	7.5	15.5	6.8	67

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Jan											
06...	1.0	582	7.6	18.5	2.13	0	2.0	8.5	90	.6	280
06...	10.0	582	7.6	16.5	--	--	--	8.7	89	--	--
06...	20.0	582	7.5	15.5	--	--	--	5.9	68	--	--
06...	28.0	582	7.5	15.0	--	0	4.0	6.9	68	.5	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Jan												
06...	16	1	250	42	66	21	24	.7	2.5	256	210	32
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	240	36	64	20	24	.7	2.6	252	207	32

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Chromium, dissolved (µg/L)	Cobalt, dissolved (µg/L)
Jan												
06...	40	.30	9.9	320	3	0	.77	.060	.050	1	ND	ND
06...	--	--	--	--	--	--	.67	.030	.040	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	40	.30	10	320	8	2	.66	.070	.050	1	ND	ND

Date	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)
Jan												
06...	14	<10	ND	<10	<.5	<20	<.0	<.00	<.0	<.00	<.00	<.00
06...	--	20	--	<10	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	9	<10	ND	<10	<.5	20	<.0	<.00	<.0	<.00	<.00	<.00

Table 31.--Chemical-quality survey of Town Lake, January 06, 1976--Continued

301500097424801 SITE Ac--Continued

Date	Di-azinon, total (μg/L)	Di-eldrin, total (μg/L)	Endrin, total (μg/L)	Hepta-chlor, total (μg/L)	Hepta-chlor epoxide, total (μg/L)	Lindane, total (μg/L)	Mala-thion, total (μg/L)	Methyl para-thion, total (μg/L)	2,4-D, total (μg/L)	2,4,5-T, total (μg/L)	Silvex, total (μg/L)
Jan											
06...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.30	<.00	<.00
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	.01	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.36	.01	<.00

301503097424701 SITE Al

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (μS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Jan						
06...	1.0	582	7.7	18.5	8.5	90
06...	10.0	582	7.7	17.0	8.8	91
06...	16.0	582	7.7	16.0	8.6	86

301500097440801 SITE Br

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (μS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Jan						
06...	1.0	582	7.8	17.5	8.8	92
06...	10.0	582	7.8	17.0	8.8	91
06...	17.0	582	7.7	16.0	8.8	88

301504097440901 SITE Bc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (μS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Jan						
06...	1.0	582	7.8	18.0	8.7	92
06...	10.0	582	7.8	17.0	8.8	91
06...	20.0	582	7.7	15.5	8.8	87
06...	27.0	582	7.7	15.5	8.8	87

301544097445201 SITE Cr

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (μS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Jan						
06...	1.0	582	7.6	16.0	9.6	96
06...	10.0	582	7.7	15.5	9.2	91

Table 31.--Chemical-quality survey of Town Lake, January 06, 1976--Continued

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
06...	1.0	582	7.6	16.5	9.6	98
06...	10.0	582	7.5	15.0	9.2	90
06...	16.0	582	7.5	14.0	9.5	91

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
06...	1.0	617	7.3	16.0	8.3	83
06...	11.0	596	7.5	13.0	9.7	92

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Jan											
06...	1.0	617	7.3	15.5	0	1.0	8.6	85	.4	220	14
06...	10.0	596	7.5	12.5	--	--	9.5	89	--	--	--
06...	20.0	596	7.5	12.5	0	25	9.6	90	.4	--	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)
Jan												
06...	220	270	26	75	21	20	.5	1.8	304	249	24	29
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	260	34	69	21	22	.6	2.2	276	226	29	37

Date	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (mg/L)	Chromium, dissolved (µg/L)	Cobalt, dissolved (µg/L)
Jan												
06...	.20	10	330	1	1	1.4	.010	<.00	.020	<1	ND	ND
06...	--	--	--	--	--	.81	.030	<.00	.010	--	--	--
06...	.30	9.4	330	54	10	.81	.030	.07	.020	<1	ND	ND

best copy available

Table 31.--Chemical-quality survey of Town Lake, January 06, 1976--Continued

301558097452201 SITE Dc--Continued

Date	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)
Jan												
06...	4	<10	ND	<10	<.5	ND	<.0	<.00	<.0	<.00	<.00	<.00
06...	--	<10	--	<10	--	--	--	--	--	--	--	--
06...	7	<10	ND	<10	<.5	ND	<.0	<.00	<.0	<.00	<.00	<.00

Date	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endrin, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)	Lindane, total (µg/L)	Mala-thion, total (µg/L)	Methyl para-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Jan											
06...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.02	<.00	<.00
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.18	<.00	<.00

301712097470701 SITE Ec

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Color (plat-inum-cobalt units)	Tur-bid-ity (NTU)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)	Oxygen demand, bio-chem-ical, 5-day (mg/L)	Coli-form, total, (cols./ 100 mL)	Coli-form, fecal, 0.7 µm-MF (cols./ 100 mL)
Jan											
06...	1.0	566	7.4	12.5	0	1.0	9.3	87	.6	9	9
06...	5.0	566	7.4	12.5	--	--	9.4	88	--	--	--
06...	13.0	566	7.7	11.0	0	2.0	9.6	86	.7	--	--

Date	Strep-tococci, fecal, KF Agar (cols./ 100 mL)	Hard-ness (mg/L $CaCO_3$)	Hard-ness, noncar-bonate (mg/L $CaCO_3$)	Calcium, dis-solved (mg/L)	Magne-sium, dis-solved (mg/L)	Sodium, dis-solved (mg/L)	Sodium ad-sorp-tion ratio	Potas-sium, dis-solved (mg/L)	Bicar-bonate, fet-fld (mg/L)	Alka-linity, field (mg/L $CaCO_3$)	Sulfate, dis-solved (mg/L)	Chlo-ride, dis-solved (mg/L)
Jan												
06...	10	230	41	59	21	26	.8	2.8	236	194	33	44
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	220	40	53	21	30	.9	3.3	220	180	36	51

Date	Fluo-ride, dis-solved (mg/L)	Silica, dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, residue at 105 °C, sus-pended (mg/L)	Solids, vola-tile, sus-pended (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)	Nitro-gen, ammonia, total (mg/L)	Phos-phorus, total (mg/L)	Arsenic, dis-solved (µg/L)	Chro-mium, dis-solved (µg/L)	Cobalt, dis-solved (µg/L)	Copper, dis-solved (µg/L)
Jan												
06...	.30	9.4	310	3	1	.42	.010	.020	1	ND	ND	3
06...	--	--	--	--	--	.41	<.010	.010	--	--	--	--
06...	.30	9.4	310	3	1	.19	.010	.020	1	ND	ND	2

Date	Iron, dis-solved (µg/L)	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)
Jan											
06...	<10	ND	<10	<.5	ND	<.0	<.00	<.0	<.00	<.00	<.00
06...	20	--	<10	--	--	--	--	--	--	--	--
06...	<10	ND	20	<.5	ND	<.0	<.00	<.0	<.00	<.00	<.00

Table 31.--Chemical-quality survey of Town Lake, January 06, 1976--Continued

301712097470701 SITE Ec--Continued

Date	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endrin, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)	Lindane, total (µg/L)	Mala-thion, total (µg/L)	Methyl para-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Jan											
06...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.05	<.00	<.00
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.06	<.00	<.00

301601097454001 SITE Fc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Jan						
06...	1.0	630	7.0	20.0	8.8	96

Table 32.--Chemical-quality survey of Town Lake, April 20, 1976

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
20...	1.0	368	7.9	19.0	7.6	81
20...	10.0	368	7.9	18.0	7.6	80
20...	20.0	368	7.9	18.0	7.5	79

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Apr											
20...	1.0	370	7.9	19.0	.30	30	20	7.6	81	1.1	9,200
20...	10.0	264	7.9	18.0	--	--	--	7.6	80	--	--
20...	24.0	353	7.9	18.0	--	55	45	7.4	78	.9	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)
Apr												
20...	2,500	3,700	170	21	48	12	9.9	.3	2.3	182	149	18
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	150	21	41	12	13	.5	2.6	160	131	22

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Apr											
20...	16	.30	8.2	200	26	4	.36	.050	.020	<10	<10
20...	--	--	--	--	--	--	.26	.060	.020	<10	<10
20...	23	.30	8.0	200	60	9	.26	.060	.030	<10	<10

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
20...	1.0	370	7.9	19.0	7.6	81
20...	10.0	344	7.9	18.0	7.6	80
20...	18.0	340	7.9	18.0	7.4	78

Table 32.--Chemical-quality survey of Town Lake, April 20, 1976--Continued

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
20...	1.0	440	7.9	20.0	7.3	79
20...	13.0	440	7.9	19.0	7.1	76

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
20...	1.0	428	7.9	19.5	7.4	80
20...	10.0	437	7.9	19.0	7.4	79
20...	23.0	412	7.9	18.5	7.4	79

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
20...	1.0	466	7.8	22.0	7.5	85
20...	8.0	482	7.7	19.5	7.2	77

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
20...	1.0	458	7.8	21.5	7.5	84
20...	10.0	485	7.7	19.5	7.2	77
20...	15.0	475	7.7	19.5	6.8	73

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
20...	1.0	452	7.9	20.0	8.4	91
20...	9.0	452	7.9	20.0	7.9	86

Table 32.--Chemical-quality survey of Town Lake, April 20, 1976--Continued

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Apr											
20...	1.0	451	7.9	20.0	.64	10	8.0	8.1	88	.5	1,500
20...	10.0	452	7.8	19.5	--	--	--	7.7	83	--	--
20...	20.0	454	7.8	19.5	--	10	9.0	7.7	83	.7	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Apr												
20...	960	1,200	230	23	66	15	7.6	.2	1.6	249	204	18
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	220	27	64	15	10	.3	1.9	238	195	20

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Apr												
20...	12	.30	9.3	250	12	1	.43	.020	.22	.010	<10	<10
20...	--	--	--	--	--	--	.40	.020	.26	.010	<10	<10
20...	16	.30	9.2	250	12	2	.40	.030	--	.010	<10	<10

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Apr											
20...	1.0	509	8.1	19.0	.58	5	9.0	7.6	81	.7	680
20...	10.0	509	8.1	19.0	--	5	8.0	7.6	81	.7	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Apr												
20...	240	560	200	41	46	20	27	.9	3.1	190	156	33
20...	--	--	200	43	46	20	27	.9	3.1	188	154	33

Table 32.--Chemical-quality survey of Town Lake, April 20, 1976--Continued

301712097470701 SITE Ec--Continued

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Apr											
20...	48	.40	8.7	280	10	1	.21	.040	.010	<10	<10
20...	47	.40	8.6	280	12	1	.18	.050	.020	<10	<10

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
20...	1.0	450	7.9	20.5	8.3	91
20...	5.0	450	7.9	20.5	8.3	91

Table 33.--Chemical-quality survey of Town Lake, September 01, 1976

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; ND, not detected; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
01...	1.0	524	7.8	27.0	5.9	75
01...	10.0	522	7.8	25.5	5.5	69
01...	20.0	522	7.7	25.5	5.4	68
01...	24.0	522	7.7	25.0	5.1	63

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Sept										
01...	1.0	523	7.8	26.5	2.07	0	1.0	5.7	72	.1
01...	10.0	523	7.7	25.5	--	--	--	5.5	69	--
01...	23.0	521	7.7	25.5	--	0	7.0	5.3	66	.2

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Sept										
01...	5,600	520	22	200	38	46	21	27	.9	3.0
01...	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	200	38	46	21	27	.9	3.0

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO$_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Sept										
01...	200	164	28	49	.30	9.5	280	3	1	.07
01...	--	--	--	--	--	--	--	--	--	.06
01...	200	164	28	49	.30	9.5	280	16	4	.09

Date	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Chromium, dissolved (µg/L)	Cobalt, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)
Sept										
01...	.020	.010	2	2	ND	5	<10	ND	<10	<.5
01...	.020	.010	--	--	--	--	<10	--	<10	--
01...	.040	<.010	1	ND	ND	5	250	ND	<10	<.5

Table 33.--Chemical-quality survey of Town Lake, September 01, 1976--Continued

301500097424801 SITE Ac--Continued

Date	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endrin, total (µg/L)
Sept										
01...	<20	<.0	<.00	<.0	<.00	<.01	<.00	--	<.00	<.00
01...	--	--	--	--	--	--	--	--	--	--
01...	20	<.0	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00

Date	Ethion, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)	Lindane, total (µg/L)	Mala-thion, total (µg/L)	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Sept										
01...	<.00	<.00	<.00	<.00	<.00	<.00	--	.01	<.00	<.00
01...	--	--	--	--	--	--	--	--	--	--
01...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	--	--	--

301503097424701 SITE Al

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Sept						
01...	1.0	522	7.8	26.5	5.9	75
01...	10.0	522	7.7	25.5	5.5	69
01...	15.0	520	7.7	25.0	5.2	64

301500097440801 SITE Br

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Sept						
01...	1.0	522	7.7	25.0	5.2	64
01...	10.0	522	7.7	25.0	5.1	63
01...	15.0	522	7.7	25.0	5.1	63

301504097440901 SITE Bc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Sept						
01...	1.0	520	7.8	25.5	5.4	68
01...	10.0	520	7.7	25.0	5.1	63
01...	20.0	520	7.6	25.0	5.0	62

Table 33.--Chemical-quality survey of Town Lake, September 01, 1976--Continued

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
01...	1.0	520	7.6	24.5	5.3	65
01...	8.0	520	7.6	24.5	5.2	63

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (°S/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
01...	1.0	528	7.8	26.5	5.7	72
01...	10.0	522	7.7	24.5	5.0	61
01...	16.0	522	7.7	24.5	5.0	61

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
01...	1.0	528	7.8	24.5	5.4	66
01...	11.0	530	7.7	24.0	5.0	61

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Sept										
01...	1.0	528	7.8	24.5	1.43	0	3.0	5.3	65	.3
01...	10.0	528	7.8	24.5	--	--	--	5.2	63	--
01...	17.0	530	7.7	24.5	--	0	4.0	5.2	63	.1

Date	Coliform, total (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)
Sept											
01...	330	10	8	200	36	45	21	27	.9	3.0	200
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	210	40	46	22	27	.8	3.0	202

Table 33.--Chemical-quality survey of Town Lake, September 01, 1976--Continued

301558097452201 SITE Dc--continued

Date	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)
Sept											
01...	164	28	49	.30	9.5	280	8	3	.07	.030	.28
01...	--	--	--	--	--	--	--	--	.06	.010	--
01...	166	27	49	.30	9.5	280	7	2	.08	.010	.26

Date	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Chromium, dissolved (µg/L)	Cobalt, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)
Sept											
01...	<.010	1	ND	ND	3	<10	ND	<10	<.5	<20	<.0
01...	<.010	--	--	--	--	<10	--	<10	--	--	--
01...	.010	1	ND	ND	3	40	ND	20	<.5	<20	<.0

Date	Naphthalenes polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)
Sept											
01...	<.00	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
01...	--	--	--	--	--	--	--	--	--	--	--
01...	<.00	<.00	<.0	<.00	.01	<.00	<.00	<.00	<.00	<.00	<.00

Date	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Parathion, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Sept											
01...	<.00	<.00	<.00	<.00	<.00	<.00	0	<.00	.02	<.00	<.00
01...	--	--	--	--	--	--	--	--	--	--	--
01...	<.00	<.00	<.00	<.00	<.00	<.00	0	<.00	--	--	--

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Sept										
01...	1.0	527	7.8	24.0	.70	0	4.0	57.0	88	.4
01...	12.0	525	7.8	24.0	--	0	5.0	88.0	57	.4

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)
Sept											
01...	250	8	14	200	39	43	22	28	.9	3.1	195
01...	--	--	--	190	36	43	21	28	.9	3.1	194

Table 33.--Chemical-quality survey of Town Lake, September 01, 1976--Continued

301712097470701 SITE Ec--Continued

Date	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)
Sept											
01...	160	29	51	.30	9.5	280	7	2	.02	.010	<.010
01...	159	29	51	.30	9.5	280	10	3	.03	.020	<.010

Date	Arsenic, dissolved (µg/L)	Chromium, dissolved (µg/L)	Cobalt, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)
Sept											
01...	1	ND	ND	3	<10	ND	<10	<.5	<20	<.0	<.00
01...	2	ND	ND	4	<10	ND	<10	<.5	<20	<.0	<.00

Date	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)
Sept											
01...	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
01...	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Parathion, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Sept										
01...	<.00	<.00	<.00	<.00	<.00	0	<.00	<.00	<.00	<.00
01...	<.00	<.00	<.00	<.00	<.00	0	<.00	.01	<.00	<.00

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept							
01...	1.0	600	7.4	23.0	--	10.8	128

Table 34.--Chemical-quality survey of Town Lake, September 02, 1976

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliter; µm-MF, micrometer membrane filter; ---, not determined; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
02...	1.0	518	7.9	26.5	6.4	81
02...	10.0	518	7.7	25.0	5.4	67
02...	20.0	518	7.7	25.0	5.1	63

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)
Sept							
02...	1.0	518	7.8	26.0	.94	0	4.0
02...	10.0	517	7.6	25.0	--	--	--
02...	20.0	514	7.6	24.5	--	--	--
02...	24.0	504	7.5	24.0	--	0	7.0

Date	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Sept								
02...	5.9	74	.7	8,000	2,800	2,500	6	0
02...	5.2	64	--	--	--	--	--	--
02...	5.0	61	--	--	--	--	--	--
02...	4.8	59	.5	--	--	--	11	0

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
02...	1.0	515	7.8	25.5	5.4	68
02...	10.0	502	7.7	24.5	5.0	61
02...	16.0	502	7.7	24.5	5.0	61

Table 34.--Chemical-quality survey of Town Lake, September 02, 1976--Continued

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
02...	1.0	500	7.8	25.0	5.4	67
02...	10.0	500	7.8	24.5	5.2	63
02...	15.0	500	7.8	24.5	5.2	63

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
02...	1.0	470	7.8	25.0	5.4	67
02...	10.0	502	7.8	24.5	5.2	63
02...	20.0	496	7.8	24.5	5.2	63
02...	24.0	502	7.8	24.5	5.1	62

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
02...	1.0	516	7.8	24.5	5.1	62
02...	13.0	520	7.8	24.5	5.1	62

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
02...	1.0	380	7.9	26.0	6.2	78
02...	10.0	516	7.8	24.5	5.0	61
02...	15.0	519	7.8	24.5	5.0	61

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept						
02...	1.0	526	7.8	24.5	5.6	68
02...	9.0	526	7.8	24.0	5.2	63

Table 34.--Chemical-quality survey of Town Lake, September 02, 1976--Continued

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)
Sept							
02...	1.0	518	7.8	24.5	1.40	0	2.0
02...	10.0	522	7.8	24.0	--	--	--
02...	18.0	525	7.8	24.5	--	0	4.0

Date	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Sept								
02...	5.4	66	.4	6,800	680	1,600	4	0
02...	5.2	63	--	--	--	--	--	--
02...	5.0	61	.5	--	--	--	6	0

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)
Sept							
02...	1.0	525	7.9	24.0	.76	0	4.0
02...	12.0	534	7.9	24.0	--	0	4.0

Date	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Sept								
02...	5.0	61	.5	770	7	30	7	1
02...	5.0	61	.5	--	--	--	8	2

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Sept							
02...	1.0	608	7.4	23.0	1.46	9.4	112
02...	6.0	602	7.4	23.0	--	9.2	110

Table 35.--Chemical-quality survey of Town Lake, December 28, 1976

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; ND, not detected]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
28...	1.0	554	8.0	17.0	9.4	100
28...	10.0	554	7.9	16.0	9.4	98
28...	19.0	554	7.8	15.0	8.9	91

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Dec											
28...	1.0	554	8.0	17.0	1.83	0	1.0	9.4	100	.4	680
28...	10.0	554	7.9	15.5	--	--	--	9.4	97	--	--
28...	24.0	554	7.8	14.0	--	0	45	8.8	88	.1	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Dec											
28...	12	6	210	36	49	22	26	.8	3.0	216	177
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	220	38	51	22	26	.8	3.0	219	180

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Dec											
28...	35	48	.30	8.4	300	1	0	.26	.020	.030	1
28...	--	--	--	--	--	--	--	.26	.020	.010	--
28...	35	47	.20	8.6	300	92	10	.28	.040	.020	2

Date	Barium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)
Dec											
28...	<100	<20	7	40	3	<10	<.5	<1	ND	<20	<.0
28...	--	--	--	<10	--	7	--	--	--	--	--
28...	<100	9	6	30	8	8	<.5	<1	ND	<20	<.0

Table 35.--Chemical-quality survey of Town Lake, December 28, 1976--Continued

301500097424801 SITE Ac--Continued

Date	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)
Dec											
28...	<.00	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
28...	--	--	--	--	--	--	--	--	--	--	--
28...	<.00	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Parathion, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Dec											
28...	<.00	<.00	<.00	<.00	<.00	<.00	0	<.00	<.00	<.00	<.00
28...	--	--	--	--	--	--	--	--	--	--	--
28...	<.00	<.00	<.00	<.00	<.00	<.00	0	<.00	<.00	<.00	<.00

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
28...	1.0	554	8.0	17.0	9.4	100
28...	10.0	554	7.9	16.0	9.3	97
28...	16.0	554	7.8	15.5	9.0	93

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
28...	1.0	554	7.9	15.5	9.3	96
28...	13.0	554	7.9	15.0	9.3	95

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
28...	1.0	554	7.9	15.0	9.3	95
28...	10.0	554	7.9	15.0	9.3	95
28...	22.0	554	7.9	15.0	9.3	95

Table 35.--Chemical-quality survey of Town Lake, December 28, 1976--Continued

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
28...	1.0	554	7.8	16.0	9.5	99
28...	8.0	554	7.8	16.0	9.5	99

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
28...	1.0	554	7.8	16.5	9.3	98
28...	10.0	554	7.8	14.5	9.3	94
28...	16.0	554	7.8	14.5	9.3	94

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
28...	1.0	557	7.8	15.0	9.7	99
28...	12.0	557	7.8	14.0	9.6	96

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Dec											
28...	1.0	557	7.8	14.0	3.7	0	1.0	9.4	94	.2	940
28...	10.0	557	7.8	14.0	--	--	--	9.4	94	--	--
28...	20.0	557	7.8	14.0	--	0	12	9.6	96	.3	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)
Dec												
28...	57	21	230	37	56	22	23	.7	2.6	236	194	33
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	220	39	52	22	25	.8	2.9	222	182	34

Table 35.--Chemical-quality survey of Town Lake, December 28, 1976--Continued

301558097452201 SITE Dc--Continued

Date	Chloride, dissolved (mg/L)	Fluoride, dis - solved (mg/L)	Silica, dis-, solved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Dec											
28...	42	.20	8.3	300	2	0	.37	.030	.23	.010	1
28...	--	--	--	--	--	--	.18	.010	.23	.010	--
28...	46	.30	8.3	300	24	5	.16	.020	.21	.010	1

Date	Barium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)
Dec											
28...	<100	8	5	<10	ND	3	<.5	<1	ND	<20	<.0
28...	--	--	--	<10	--	5	--	--	--	--	--
28...	<100	11	4	<10	ND	8	<.5	<1	ND	<20	<.0

Date	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)
Dec											
28...	<.00	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
28...	--	--	--	--	--	--	--	--	--	--	--
28...	<.00	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Parathion, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Dec											
28...	<.00	<.00	<.00	<.00	<.00	<.00	0	<.00	<.00	<.00	<.00
28...	--	--	--	--	--	--	--	--	--	--	--
28...	<.00	<.00	<.00	<.00	<.00	<.00	0	<.00	<.00	<.00	<.00

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Dec											
28...	1.0	550	7.9	13.5	2.13	0	2.0	10.0	99	.5	250
28...	12.0	550	7.9	13.5	--	0	2.0	10.0	99	.5	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)
Dec												
28...	6	5	210	42	49	22	26	.8	3.0	208	171	36
28...	--	--	200	40	45	22	28	.9	3.2	199	163	37

Table 35.--Chemical-quality survey of Town Lake, December 28, 1976--Continued

301712097470701 SITE Ec--Continued

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Dec											
28...	49	.30	8.4	300	2	0	.13	.010	.25	.010	2
28...	53	.30	8.2	290	--	0	.13	.010	.23	.010	1

Date	Barium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)
Dec											
28...	<100	<20	4	<10	ND	6	<.5	<1	ND	<20	<.0
28...	<100	8	4	<10	ND	1	<.5	<1	ND	<20	<.0

Date	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)
Dec											
28...	<.00	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
28...	<.00	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Parathion, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Dec											
28...	<.00	<.00	<.00	<.00	<.00	<.00	0	<.00	<.00	<.00	<.00
28...	<.00	<.00	<.00	<.00	<.00	<.00	0	<.00	<.00	<.00	<.00

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
28...	1.0	580	7.5	19.0	12.2	136
28...	5.0	580	7.5	19.0	12.0	133

Table 36.--Chemical-quality survey of Town Lake, April 26, 1977

[μS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; μm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; μg/L, micrograms per liter; ---, not determined; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
26...	1.0	550	8.1	17.0	10.3	110
26...	10.0	550	8.1	17.0	10.3	110
26...	20.0	550	8.1	17.0	10.3	110
26...	30.0	550	8.0	17.0	10.3	110

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Apr											
26...	1.0	550	8.1	17.0	2.32	0	2.0	10.3	110	.2	400
26...	10.0	550	8.0	17.0	--	--	--	10.3	110	--	--
26...	20.0	550	8.0	17.0	--	--	--	10.3	110	--	--
26...	28.0	550	8.0	17.0	--	0	5.0	10.3	110	.2	--

Date	Coliform, fecal, 0.7 μm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Apr												
26...	16	6	220	53	49	23	29	.9	3.4	200	164	37
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	220	53	49	23	29	.9	3.5	200	164	36

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (μg/L)	Manganese, dissolved (μg/L)
Apr											
26...	53	.20	8.7	300	2	0	.16	.020	<.010	<10	<10
26...	--	--	--	--	--	--	.18	.020	.010	<10	<10
26...	--	--	--	--	--	--	--	--	--	--	--
26...	53	.20	8.7	300	7	0	.16	.020	.010	<10	<10

Table 36.--Chemical-quality survey of Town Lake, April 26, 1977--Continued

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
26...	1.0	550	8.1	17.0	10.3	110
26...	10.0	550	8.1	17.0	10.3	110
26...	17.0	550	8.1	17.0	10.3	110

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
26...	1.0	550	8.0	17.0	10.2	109
26...	10.0	550	8.1	17.0	10.2	109
26...	18.0	550	8.1	17.0	10.2	109

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
26...	1.0	550	8.1	17.0	10.4	111
26...	10.0	550	8.1	17.0	10.4	111
26...	20.0	550	8.1	17.0	10.4	111
26...	29.0	550	8.1	17.0	10.4	111

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
26...	1.0	550	8.1	17.0	10.3	110
26...	10.0	550	8.1	17.0	10.3	110
26...	18.0	550	8.1	17.0	10.3	110

Table 36.--Chemical-quality survey of Town Lake, April 26, 1977--Continued

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
26...	1.0	548	8.1	17.0	10.4	111
26...	10.0	548	8.1	17.0	10.3	110
26...	17.0	548	8.1	17.0	10.3	110

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
26...	1.0	548	8.0	18.0	10.0	109
26...	15.0	548	8.1	17.0	10.2	109

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Apr											
26...	1.0	548	8.1	17.0	1.74	0	2.0	10.3	110	.3	740
26...	10.0	548	8.1	17.0	--	--	--	10.2	109	--	--
26...	20.0	548	8.1	17.0	--	0	4.0	10.2	109	.1	--

Date	Coliform, fecal, 0.7 μm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Apr												
26...	16	180	220	51	53	22	24	.7	2.9	210	172	34
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	230	65	52	24	29	.9	3.4	200	164	37

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (μg/L)	Manganese, dissolved (μg/L)
Apr												
26...	48	.20	8.8	300	2	0	.20	.020	.43	.010	<10	<10
26...	--	--	--	--	--	--	.20	.010	.32	.010	<10	<10
26...	53	.20	8.7	310	7	0	.16	.010	.37	.020	<10	<10

Table 36.--Chemical-quality survey of Town Lake, April 26, 1977--Continued

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Apr											
26...	1.0	549	8.3	16.5	1.22	0	3.0	9.5	100	.3	600
26...	11.0	549	8.3	16.5	--	0	3.0	9.4	99	.2	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)
Apr												
26...	6	14	210	46	46	23	30	.9	3.6	200	164	38
26...	--	--	210	46	46	23	30	.9	3.5	200	164	38

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Apr												
26...	56	.20	8.6	300	3	0	.13	.010	.28	<.010	<10	<10
26...	56	.20	8.6	300	3	0	.13	.010	.30	.010	<10	<10

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
26...	1.0	509	7.8	20.5	10.0	114
26...	4.0	509	7.8	20.5	10.0	114

Table 37.--Chemical-quality survey of Town Lake, August 23, 1977

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity units; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plul nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; ND, not detected]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
23...	1.0	535	7.7	27.5	5.4	69
23...	10.0	539	7.6	26.0	4.6	58
23...	24.0	539	7.6	26.0	4.6	58

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Aug										
23...	1.0	535	7.7	27.5	2.19	2.0	5.4	69	.9	1,900
23...	10.0	539	7.6	25.5	--	--	4.8	60	--	--
23...	20.0	539	7.6	25.5	--	--	4.7	59	--	--
23...	27.0	539	7.6	25.5	--	2.0	4.7	59	.8	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Aug											
23...	53	1	200	48	47	19	30	1	3.4	180	148
23...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	200	52	47	20	30	1	3.4	180	149

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (Mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Aug											
23...	37	54	.20	9.7	290	2	0	.26	.050	.010	<1
23...	--	--	--	--	--	--	--	.23	.040	<.010	--
23...	--	--	--	--	--	--	--	--	--	--	--
23...	36	54	.20	9.7	290	3	0	.23	.050	.010	1

Date	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)
Aug										
23...	ND	4	50	ND	<10	<.5	<20	<.0	<.00	<.00
23...	--	--	100	--	<10	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	ND	9	20	2	20	<.5	20	<.0	<.00	<.00

Table 37.--Chemical-quality survey of Town Lake, August 23, 1977--Continued

301500097424801 SITE Ac--Continued

Date	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)
Aug										
23...	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
23...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Parathion, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Aug										
23...	<.00	<.00	<.00	<.00	<.00	0	<.00	.15	<.00	<.00
23...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	<.00	<.00	<.00	<.00	<.00	0	<.00	.12	<.00	<.00

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
23...	1.0	539	7.7	28.0	5.4	69
23...	10.0	539	7.6	26.0	4.7	59
23...	16.0	539	7.6	26.0	4.5	56

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
23...	1.0	539	7.7	25.5	6.1	76
23...	12.0	539	7.6	25.0	5.2	64

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
23...	1.0	539	7.7	25.5	5.8	72
23...	10.0	539	7.6	25.0	5.0	62
23...	21.0	543	7.6	24.5	5.0	61

Table 37.--Chemical-quality survey of Town Lake, August 23, 1977--Continued

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
23...	1.0	539	7.6	25.0	5.0	62
23...	9.0	539	7.6	25.0	5.0	62

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
23...	1.0	539	7.6	28.0	6.7	86
23...	10.0	539	7.6	25.0	5.0	62
23...	19.0	539	7.6	25.0	4.9	60

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
23...	1.0	534	7.6	25.0	5.1	63
23...	10.0	534	7.6	25.0	5.0	62

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Aug										
23...	1.0	534	7.6	25.5	1.31	3.0	5.0	62	.7	2,300
23...	10.0	534	7.6	25.0	--	--	5.0	62	--	--
23...	20.0	542	7.6	25.0	--	4.0	5.0	62	.6	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Aug											
23...	9	9	200	48	47	19	31	1	3.5	180	148
23...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	200	42	48	19	30	1	3.3	190	156

Table 37.--Chemical-quality survey of Town Lake, August 23, 1977--Continued

301558097452201 SITE Dc--Continued

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Aug											
23...	37	55	9.6	290	4	1	.19	.030	.38	.010	1
23...	--	--	--	--	--	--	.22	.040	--	<.010	--
23...	38	54	9.6	300	6	0	.23	.040	.57	<.010	<1

Date	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron- dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)
Aug										
23...	ND	2	20	ND	<10	<.5	<20	<.0	<.00	<.00
23...	--	--	--	--	--	--	--	--	--	--
23...	ND	2	20	ND	<10	<.5	ND	<.0	<.00	<.00

Date	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)
Aug										
23...	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
23...	--	--	--	--	--	--	--	--	--	--
23...	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Parathion, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Aug										
23...	<.00	<.00	<.00	<.00	<.00	0	<.00	.13	<.00	<.00
23...	--	--	--	--	--	--	--	--	--	--
23...	<.00	<.00	<.00	<.00	<.00	0	<.00	.12	<.00	<.00

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Aug										
23...	1.0	535	7.6	24.5	.91	4.0	4.6	56	.8	1,600
23...	14.0	533	7.6	24.5	--	5.0	4.5	55	.7	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Aug											
23...	7	12	200	48	47	19	31	1	3.5	180	148
23...	--	--	200	52	47	20	31	1	3.5	180	148

Table 37.--Chemical-quality survey of Town Lake, August 23, 1977--Continued

301712097470701 SITE Ec--Continued

Date	Sulfate, dis-solved (mg/L)	Chlo-ride, dis-solved (mg/L)	Silica, dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, residue at 105 °C, sus-pended (mg/L)	Solids, vola-tile, sus-pended (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)	Ntiro-gen, ammonia, total (mg/L)	Nitro-gen, organic total (mg/L)	Phos-phorus, total (mg/L)	Arsenic, dis-solved (µg/L)
Aug											
23...	37	56	9.6	290	7	1	.15	.010	.81	<.010	<1
23...	38	57	9.6	290	6	1	.16	.050	.52	<.010	<1

Date	Chro-mium, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Lead, dis-sovled (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Naph-tha-lenes, poly-chlor., total (µg/L)	Aldrin, total (µg/L)
Aug										
23...	ND	2	20	ND	<10	<.5	<20	<.0	<.00	<.00
23...	ND	2	20	ND	<10	<.5	ND	<.0	<.00	<.00

Date	Chlor-dane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)
Aug										
23...	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
23...	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Lindane, total (µg/L)	Mala-thion, total (µg/L)	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	Para-thion, total (µg/L)	Tox-aphene, total (µg/L)	Tri-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Aug										
23...	<.00	<.00	<.00	<.00	<.00	0	<.00	.07	<.00	<.00
23...	<.00	<.00	<.00	<.00	<.00	0	<.00	.04	<.00	<.00

301601097454001 SITE Fc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Aug						
23...	1.0	610	7.3	23.5	9.7	117
23...	5.0	610	7.3	23.5	10.4	125

Table 38.--Chemical-quality survey of Town Lake, December 29, 1977

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plul nitrate µg/L, micrograms per liter; ---, not determined; <, less than; ND, not detected]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
29...	1.0	585	8.0	14.5	9.0	91
29...	10.0	585	8.0	14.0	9.0	90
29...	20.0	585	8.0	14.0	8.8	88
29...	24.0	585	7.9	13.5	8.8	87

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Dec										
29...	1.0	587	8.0	15.0	2.70	1	8.9	91	.4	1,600
29...	10.0	585	8.0	14.0	--	--	8.9	89	--	--
29...	20.0	585	7.9	13.5	--	--	8.8	87	--	--
29...	28.0	585	7.9	13.5	--	5	8.8	87	.8	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Dec											
29...	52	140	220	50	51	23	34	1	3.6	210	172
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	220	42	51	23	34	1	3.6	220	180

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Dec											
29...	0	43	56	.30	9.6	320	2	1	.00	.280	.28
29...	--	--	--	--	--	--	--	--	.28	<.010	.28
29...	--	--	--	--	--	--	--	--	--	--	--
29...	0	43	56	.20	9.6	330	96	16	.28	<.010	.28

Table 38.--Chemical-quality survey of Town Lake, December 29, 1977--Continued

301500097424801 SITE Ac--Continued

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Dec											
29...	.060	.74	.80	1.1	.010	1	<100	ND	<20	5	<10
29...	.060	.34	.40	.68	.020	--	--	--	--	--	<10
29...	--	--	--	--	--	--	--	--	--	--	--
29...	.060	.60	.66	.94	.050	1	<100	ND	ND	<2	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)
Dec										
29...	<2	<10	<.1	<1	ND	<20	<.0	<.00	<.00	.5
29...	--	<10	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	<2	<10	<.1	<1	ND	<20	<.0	<.00	<.00	.5

Date	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)
Dec										
29...	.04	.11	.15	.42	<.00	<.00	<.00	<.00	.01	<.00
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	.04	.11	.15	.42	<.00	<.00	<.00	<.00	.01	<.00

Date	Lindane, total (µg/L)	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Parathion, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Dec										
29...	.03	.14	<.00	<.00	<.00	0	<.00	.11	<.00	<.00
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	.03	.14	<.00	<.00	<.00	0	<.00	.09	<.00	<.00

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
29...	1.0	585	8.0	15.5	8.8	91
29...	10.0	585	8.0	14.0	8.9	89
29...	16.0	585	8.0	13.5	8.9	88

Table 38.--Chemical-quality survey of Town Lake, December 29, 1977--Continued

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
29...	1.0	585	7.8	14.0	9.2	92
29...	14.0	585	7.8	13.0	9.2	90

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
29...	1.0	585	7.9	14.0	9.0	90
29...	10.0	585	7.8	13.5	9.1	90
29...	20.0	585	7.8	13.0	9.0	88
29...	27.0	585	7.8	13.0	8.9	87

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
29...	1.0	585	7.7	15.0	8.9	91
29...	10.0	585	7.8	13.0	9.4	92

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
29...	1.0	585	7.7	15.0	8.8	90
29...	10.0	585	7.8	13.0	8.8	86
29...	18.0	585	7.7	12.5	8.6	83

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Dec						
29...	1.0	619	7.4	14.5	7.9	80
29...	11.0	580	7.7	12.5	8.6	83

Table 38.--Chemical-quality survey of Town Lake, December 29, 1977--Continued

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Dec										
29...	1.0	619	7.6	15.0	3.2	0	8.0	82	.2	9,800
29...	10.0	580	7.8	12.0	--	--	9.0	87	--	--
29...	18.0	580	7.8	12.0	--	4	9.1	88	.2	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO$_3$)
Dec											
29...	540	940	260	48	65	24	28	.8	2.6	260	213
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	210	51	48	23	33	1	3.7	200	164

Date	Carbonate, fet-fld, (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Dec											
29...	0	37	47	.20	10	340	2	1	.95	<.010	.95
29...	--	--	--	--	--	--	--	--	.22	<.010	.22
29...	0	42	56	.20	9.3	310	30	0	.21	<.010	.21

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Dec											
29...	.020	.35	.37	1.3	.010	1	<100	ND	ND	<2	<10
29...	.040	.73	.77	.99	.010	--	--	--	--	--	<10
29...	.060	.57	.63	.84	.040	1	<100	ND	ND	<2	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)
Dec										
29...	<2	<10	<.1	<1	ND	<20	<.0	<.00	<.00	<.0
29...	--	<10	--	--	--	--	--	--	--	--
29...	<2	<10	<.1	<1	ND	<20	<.0	<.00	<.00	<.0

Date	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)
Dec										
29...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
29...	--	--	--	--	--	--	--	--	--	--
29...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Table 38.--Chemical-quality survey of Town Lake, December 29, 1977--Continued

301558097452201 SITE Dc--Continued

Date	Lindane, total (µg/L)	Mala-thion, total (µg/L)	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	Para-thion, total (µg/L)	Tox-aphene, total (µg/L)	Tri-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Dec										
29...	<.00	<.00	<.00	<.00	<.00	0	<.00	<.00	<.00	<.00
29...	--	--	--	--	--	--	--	--	--	--
29...	<.00	<.00	<.00	<.00	<.00	0	<.00	.04	<.00	<.00

301712097470701 SITE Ec

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Trans-par-ency (secchi disk) (m)	Color (plat-inum-cobalt units)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)	Oxygen demand, bio-chem-ical, 5-day (mg/L)	Coli-form, total, (cols./100 mL)
Dec										
29...	1.0	578	7.7	13.0	2.70	1	8.4	82	.2	2,000
29...	13.0	578	7.9	12.5	--	1	8.4	82	.2	--

Date	Coli-form, fecal, 0.7 µm-MF (cols./100 mL)	Strep-tococci, fecal, KF Agar (cols./100 mL)	Hard-ness (mg/L $CaCO_3$)	Hard-ness, noncar-bonate (mg/L $CaCO_3$)	Calcium, dis-solved (mg/L)	Magne-sium, dis-solved (mg/L)	Sodium, dis-solved (mg/L)	Sodium ad-sorp-tion ratio	Potas-sium, dis-solved (mg/L)	Bicar-bonate, fet-fld (mg/L)	Alka-linity, field (mg/L $CaCO_3$)
Dec											
29...	9	160	220	50	51	23	31	.9	3.5	210	172
29...	--	--	210	48	47	23	34	1	3.9	200	164

Date	Car-bonate, fet-fld (mg/L)	Sulfate, dis-solved (mg/L)	Chlo-ride, dis-solved (mg/L)	Fluo-ride, dis-solved (mg/L)	Silica, dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, residue at 105 °C, sus-pended (mg/L)	Solids, vola-tile, sus-pended (mg/L)	Nitro-gen, nitrate, total (mg/L)	Nitro-gen, nitrite, total (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)
Dec											
29...	0	41	53	.20	9.3	320	2	0	.25	<.010	.25
29...	0	41	58	.40	9.2	310	4	0	.15	<.010	.15

Date	Nitro-gen, ammonia, total (mg/L)	Nitro-gen, organic, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Nitro-gen, total (mg/L)	Phos-phorus, total (mg/L)	Arsenic, dis-solved (µg/L)	Barium, dis-solved (µg/L)	Cadmium, dis-solved (µg/L)	Chro-mium, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)
Dec											
29...	.060	.39	.45	.70	.010	1	<100	ND	ND	ND	<10
29...	.040	.49	.53	.68	.010	1	<100	ND	ND	ND	<10

Date	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Sele-nium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Naph-tha-lenes, poly-chlor., total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)
Dec										
29...	<2	<10	<.1	<1	ND	<20	<.0	<.00	<.00	<.0
29...	ND	<10	<.1	<1	ND	<20	<.0	<.00	<.00	<.0

Table 38.--Chemical-quality survey of Town Lake, December 29, 1977--Continued

301712097470701 SITE Ec--Continued

Date	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endo-sulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)
Dec										
29...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
29...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Lindane, total (µg/L)	Mala-thion, total (µg/L)	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	Para-thion, total (µg/L)	Tox-aphene, total (µg/L)	Tri-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Dec										
29...	<.00	<.00	<.00	<.00	<.00	0	<.00	.05	<.00	<.00
29...	<.00	<.00	<.00	<.00	<.00	0	<.00	.04	<.00	<.00

301601097454001 SITE Fc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Dec						
29...	1.0	660	7.2	20.0	8.3	94
29...	4.0	660	7.2	20.0	8.2	93

Table 39.--Chemical-quality survey of Town Lake, April 10, 1978

[µS/cm, microseimens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; >, more than; ---, not determined; <, less than; ND, not detected; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
10...	1.0	570	8.1	20.5	8.8	100
10...	10.0	574	8.1	19.5	8.7	98
10...	23.0	578	8.0	18.0	8.6	93

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Apr										
10...	1.0	563	8.1	21.0	.60	5	8.9	102	1.7	>3,800
10...	10.0	570	8.1	19.5	--	--	9.0	101	--	--
10...	20.0	570	8.0	18.0	--	--	9.0	98	--	--
10...	25.0	570	8.0	18.0	--	10	8.7	95	1.3	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)
Apr											
10...	3,800	2,600	210	59	48	23	36	1	3.7	190	156
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	210	56	47	23	35	1	3.7	190	156

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Apr											
10...	0	43	59	.20	6.5	310	16	3	.10	.010	.11
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	.14	.010	.15
10...	0	36	60	.20	8.4	310	101	9	.09	.010	.10

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Apr											
10...	.040	.45	.49	.60	.030	1	<100	2	ND	<2	<10
10...	--	--	--	--	--	--	--	--	--	--	--
10...	.060	.29	.35	.50	.030	--	--	--	--	--	<10
10...	.050	.33	.38	.48	.050	1	<100	ND	ND	<2	<10

Table 39.--Chemical-quality survey of Town Lake, April 10, 1978--Continued

301500097424801 SITE Ac--Continued

Date	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Sele-nium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Naph-tha-lenes, poly-chlor., total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)
Apr										
10...	3	<10	<.1	<1	ND	20	<.0	<.00	<.00	<.0
10...	--	--	--	--	--	--	--	--	--	--
10...	--	<10	--	--	--	--	--	--	--	--
10...	3	20	<.1	<1	ND	30	<.0	<.00	<.00	<.0

Date	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endo-sulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)
Apr										
10...	<.00	<.00	<.00	.04	<.00	<.00	<.00	<.00	<.00	<.00
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	.01	.01	.02	.03	<.00	<.00	<.00	<.00	<.00	<.00

Date	Lindane, total (µg/L)	Mala-thion, total (µg/L)	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	Para-thion, total (µg/L)	Tox-aphene, total (µg/L)	Tri-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Apr										
10...	<.00	<.00	<.00	<.00	<.00	0	<.00	.03	<.00	<.00
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	<.00	<.00	<.00	<.00	<.00	0	<.00	.02	.01	<.00

301503097424701 SITE A1

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Apr						
10...	1.0	563	8.1	21.5	8.7	101
10...	10.0	570	8.1	19.0	8.9	99
10...	19.0	570	8.0	18.5	8.8	97

301500097440801 SITE Br

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Apr						
10...	1.0	460	8.1	18.5	8.6	95
10...	13.0	520	8.1	17.5	8.6	92

Table 39.--Chemical-quality survey of Town Lake, April 10, 1978--Continued

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
10...	1.0	470	8.0	18.5	8.8	97
10...	10.0	480	8.0	18.0	8.8	96
10...	19.0	550	8.0	17.5	9.3	100

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
10...	1.0	550	8.1	18.5	8.8	97
10...	6.0	550	8.1	18.0	8.8	96

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
10...	1.0	530	8.0	19.0	8.8	98
10...	10.0	550	8.1	17.5	8.8	95
10...	17.0	560	8.1	17.0	8.8	94

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
10...	1.0	570	8.0	17.5	9.2	99
10...	12.0	570	8.0	17.5	8.9	96

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Apr										
10...	1.0	570	8.0	17.5	1.00	5	9.0	97	1.6	9,400
10...	10.0	570	8.0	17.5	--	--	9.2	99	--	--
10...	20.0	570	8.1	17.0	--	5	9.0	96	1.2	--

Table 39.--Chemical-quality survey of Town Lake, April 10, 1978--Continued

301558097452201 SITE Dc--Continued

Date	Coli-form, fecal, 0.7 µm-MF (cols./ 100 mL)	Strep-tococci, fecal, KF Agar (cols./ 100 mL)	Hard-ness (mg/L $CaCO_3$)	Hard-ness, noncar-bonate (mg/L $CaCO_3$)	Calcium, dis-solved (mg/L)	Magne-sium, dis-solved (mg/L)	Sodium, dis-solved (mg/L)	Sodium ad-sorp-tion ratio	Potas-sium, dis-solved (mg/L)	Bicar-bonate, fet-fld (mg/L)	Alka-linity, field (mg/L $CaCO_3$)
Apr											
10...	2,800	K1,600	220	56	50	23	33	1	3.6	200	164
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	210	59	48	23	35	1	3.7	190	156

Date	Car-bonate, fet-fld (mg/L)	Sulfate, dis-solved (mg/L)	Chlo-ride, dis-solved (mg/L)	Fluo-ride, dis-solved (mg/L)	Silica, dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, residue at 105 °C, sus-pended (mg/L)	Solids, vola-tile, sus-pended (mg/L)	Nitro-gen, nitrate, total (mg/L)	Nitro-gen, nitrite, total (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)
Apr											
10...	0	35	58	.20	7.1	310	7	2	.07	<.010	.07
10...	--	--	--	--	--	--	--	--	.18	.010	.19
10...	0	36	61	.20	7.0	310	8	3	.08	<.010	.08

Date	Nitro-gen, ammonia, total (mg/L)	Nitro-gen, organic, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Nitro-gen, total (mg/L)	Phos-phorus, total (mg/L)	Arsenic, dis-solved (µg/L)	Barium, dis-solved (µg/L)	Cadmium, dis-solved (µg/L)	Chro-mium, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)
Apr											
10...	.050	.39	.44	.51	.010	1	<100	<2	ND	ND	<10
10...	.050	.30	.35	.54	.020	--	--	--	--	--	30
10...	.040	.28	.32	.40	.010	1	<100	ND	ND	ND	<10

Date	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Sele-nium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Naph-tha-lenes, poly-chlor., total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)
Apr										
10...	3	<10	<.1	<1	ND	<20	<.0	<.00	<.00	<.0
10...	--	<10	--	--	--	--	--	--	--	--
10...	3	<10	<.1	<1	ND	<20	<.0	<.00	<.00	<.0

Date	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endo-sulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)
Apr										
10...	<.00	<.00	<.00	.01	<.00	<.00	<.00	<.00	<.00	<.00
10...	--	--	--	--	--	--	--	--	--	--
10...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Lindane, total (µg/L)	Mala-thion, (µg/L)	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	Para-thion, total (µg/L)	Tox-aphene, total (µg/L)	Tri-thion, total (µg/L)	2,4-d, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Apr										
10...	<.00	<.00	<.00	<.00	<.00	0	<.00	.02	<.00	<.00
10...	--	--	--	--	--	--	--	--	--	--
10...	<.00	<.00	<.00	<.00	<.00	0	<.00	.02	<.00	<.00

Table 39.--Chemical-quality survey of Town Lake, April 10, 1978--Continued

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Apr										
10...	1.0	577	8.2	18.0	1.30	5	9.5	103	1.5	5,500
10...	10.0	577	8.2	18.0	--	--	9.5	103	--	--
10...	15.0	577	8.1	18.0	--	5	9.5	103	1.5	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)
Apr											
10...	280	330	210	51	45	23	36	1	3.8	190	156
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	210	51	45	23	35	1	3.8	190	156

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Apr											
10...	0	42	62	.20	8.0	310	5	3	.07	.010	.08
10...	--	--	--	--	--	--	--	--	--	--	--
10...	0	42	62	.20	7.9	310	6	1	.06	<.010	.06

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Apr											
10...	.010	.34	.35	.43	<.010	1	<100	ND	ND	<2	30
10...	--	--	--	--	--	--	--	--	--	--	--
10...	.190	.13	.32	.38	<.010	1	<100	<2	ND	<2	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total, (µg/L)	Chlordane, total (µg/L)
Apr										
10...	2	<10	<.1	<1	ND	<20	<.0	<.00	<.00	<.0
10...	--	--	--	--	--	--	--	--	--	--
10...	ND	<10	<.1	<1	ND	<20	--	--	--	--

Date	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)
Apr										
10...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--

Table 39.--Chemical-quality survey of Town Lake, April 10, 1978--Continued

301712097470701 SITE Ec--Continued

Date	Lindane, total (µg/L)	Mala-thion, total (µg/L)	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	Para-thion, total (µg/L)	Tox-aphene, total (µg/L)	Tri-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Apr										
10...	<.00	<.00	<.00	<.00	<.00	0	<.00	.03	<.00	<.00
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--

301601097454001 SITE Fc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Apr						
10...	1.0	577	8.3	18.0	9.9	108

Table 40.--Chemical-quality survey of Town Lake, July 18, 1978

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meter; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration: NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
18...	1.0	601	7.9	31.0	6.6	90
18...	10.0	601	7.8	27.0	7.2	94
18...	19.0	601	7.6	26.5	5.7	74

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
July									
18...	1.0	601	7.8	29.5	2.10	6	6.5	88	.6
18...	10.0	601	7.8	27.0	--	--	6.9	90	--
18...	20.0	601	7.7	26.0	--	--	6.1	78	--
18...	27.0	603	7.5	26.0	--	6	5.0	64	.6

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
July										
18...	8,400	84	5	220	52	47	24	37	1	3.8
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	220	52	47	24	37	1	3.8

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue, at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
July										
18...	200	164	0	42	70	.20	8.7	330	2	0
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	200	164	0	42	68	.20	9.0	330	4	0

Table 40.--Chemical-quality survey of Town Lake, July 18, 1978--Continued

301500097424801 SITE Ac--Continued

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
July										
18...	.09	<.010	.09	<.010	.81	.81	.90	<.010	<10	<10
18...	--	--	--	--	--	--	--	--	--	--
18...	.09	<.010	.09	<.010	.26	.26	.35	<.010	50	20
18...	.10	<.010	.10	<.010	.32	.32	.42	<.010	40	20

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
18...	1.0	601	7.8	30.0	6.6	89
18...	12.0	601	7.8	26.5	6.5	84

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
18...	1.0	601	7.8	26.5	6.8	88
18...	13.0	601	7.7	25.5	5.9	76

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
18...	1.0	601	7.8	26.5	6.8	88
18...	10.0	601	7.7	25.5	6.1	78
18...	20.0	601	7.7	25.5	5.8	74
18...	25.0	601	7.7	25.5	5.8	74

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
18...	1.0	601	7.7	25.5	6.4	82
18...	9.0	601	7.7	25.5	6.3	81

Table 40.--Chemical-quality survey of Town Lake, July 18, 1978--Continued

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
18...	1.0	601	7.8	27.5	6.5	86
18...	10.0	601	7.7	27.5	6.3	81
18...	15.0	601	7.7	27.5	6.3	81

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
18...	1.0	603	7.6	25.5	6.2	79
18...	10.0	603	7.7	25.5	6.1	78
18...	19.0	603	7.7	25.5	6.4	82

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
July									
18...	1.0	603	7.7	25.5	1.90	5	6.3	81	.5
18...	10.0	603	7.7	25.0	--	--	5.8	73	--
18...	21.0	601	7.7	25.0	--	5	5.6	71	.6

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
July										
18...	3,200	38	4	230	64	50	25	37	1	3.7
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	220	65	49	24	37	1	3.8

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO$_3$)	Carbonate, fet-fld (mf/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
July										
18...	200	164	0	42	68	.20	8.8	330	2	0
18...	--	--	--	--	--	--	--	--	--	--
18...	190	156	0	42	70	.20	8.7	330	7	1

Table 40.--Chemical-quality survey of Town Lake, July 18, 1978--Continued

301556097452301 SITE Dc--Continued

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen total (mg/L)	Phosphorus, total (mg/L)	Iton, dissolved total (µg/L)	Manganese, dissolved (µg/L)
July										
18...	.12	.010	.13	<.010	.35	.35	.48	<.010	<10	20
18...	.09	<.010	.09	<.010	.33	.33	.42	<.010	<10	20
18...	.09	<.010	.09	<.010	.29	.29	.38	<.010	<10	20

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
July									
18...	1.0	599	7.7	25.0	1.20	5	5.9	75	.5
18...	13.0	599	7.7	25.0	--	7	5.9	75	.5

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cosl./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
July										
18...	960	4	4	220	65	47	25	37	1	3.9
18...	--	--	--	220	63	48	24	37	1	3.9

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
July										
18...	190	156	0	43	70	.20	8.7	330	5	1
18...	190	156	0	42	70	.20	8.7	330	5	2

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (mg/L)	Manganese, dissolved (µg/L)
July										
18...	.09	<.010	.09	<.010	.43	.43	.52	<.010	<10	<10
18...	.08	<.010	.08	<.010	1.2	1.2	1.3	<.010	<10	<10

Table 40.--Chemical-quality survey of Town Lake, July 18, 1978--Continued

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
18...	1.0	653	7.4	26.0	7.3	94
18...	6.0	705	7.2	24.5	9.8	122

Table 41.--Chemical-quality survey of Town Lake, October 16, 1978

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plul nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; ND, not detected]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation
Oct						
16...	1.0	543	7.6	26.5	6.0	76
16...	10.0	543	7.6	25.5	6.3	79
16...	20.0	543	7.2	25.0	2.9	36
16...	30.0	543	7.2	25.0	1.9	23

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Oct										
16...	1.0	543	7.6	26.5	3.00	5	2.0	5.9	75	.5
16...	10.0	543	7.7	25.5	--	--	--	6.4	80	--
16...	20.0	543	7.5	25.0	--	--	--	5.2	64	--
16...	24.0	543	7.6	25.0	--	5	2.0	5.6	69	.4

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)
Oct											
16...	3,200	6	1	190	39	42	20	32	1	3.9	180
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	190	42	43	20	33	1	3.9	180

Date	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)
Oct											
16...	148	0	37	62	.20	9.9	300	1	0	.05	.010
16...	--	--	--	--	--	--	--	--	--	.04	<.010
16...	--	--	--	--	--	--	--	--	--	--	--
16...	148	0	37	62	.20	10	300	2	1	.01	.010

Table 41.--Chemical-quality survey of Town Lake, October 16, 1978--Continued

301500097424801 SITE Ac--Continued

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)
Oct											
16...	.06	.040	.35	.39	.45	.020	2	<100	ND	ND	7
16...	.04	.010	.43	.44	.48	.020	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	.02	.050	1.5	1.5	1.5	.010	2	<100	ND	ND	7

Date	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)
Oct											
16...	<10	ND	20	<.1	<1	ND	ND	0	<.00	<.00	<.0
16...	<10	--	<10	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	<10	ND	60	<.1	<1	ND	<20	0	<.00	<.00	<.0

Date	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)
Oct											
16...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Oct											
16...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	<.00	<.00	<.00
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.05	<.00	<.00

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
16...	1.0	543	7.6	27.0	6.0	76
16...	10.0	543	7.6	26.0	5.8	72
16...	17.0	543	7.8	25.0	6.8	84

Table 41.--Chemical-quality survey of Town Lake, October 16, 1978--Continued

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
16...	1.0	543	7.9	25.0	7.9	98
16...	10.0	543	7.9	25.0	7.7	95
16...	14.0	543	7.9	24.5	7.6	93

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
16...	1.0	543	7.9	25.0	8.0	99
16...	10.0	543	7.9	24.5	7.9	96
16...	20.0	561	7.5	24.0	6.0	73
16...	24.0	561	7.5	24.0	5.9	72

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
16...	1.0	574	7.7	25.0	8.1	100
16...	7.0	574	7.7	24.0	8.3	101

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
16...	1.0	574	7.6	25.0	8.0	99
16...	10.0	574	7.6	24.0	7.7	94
16...	16.0	574	7.5	23.5	8.0	96

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
16...	1.0	600	7.7	23.5	8.7	105
16...	13.0	600	7.3	22.0	7.9	93

Table 41.--Chemical-quality survey of Town Lake, October 16, 1978--Continued

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Oct										
16...	1.0	600	7.6	23.0	3.00	0	2.0	8.9	106	1.0
16...	10.0	600	7.4	22.5	--	--	--	8.6	101	--
16...	20.0	657	7.1	21.5	--	0	2.0	6.0	70	.5

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Oct										
16...	1,400	31	1	230	41	56	22	34	1	3.2
16...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	270	41	69	24	30	.8	2.3

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO$_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Oct										
16...	230	189	0	38	53	.30	11	330	1	0
16...	--	--	--	--	--	--	--	--	--	--
16...	280	230	0	39	47	.30	12	360	2	0

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct										
16...	.14	.010	.15	.020	.37	.39	.54	.030	<0	6
16...	.16	.010	.17	.010	.45	.46	.63	.020	<10	<10
16...	.28	.010	.29	.060	.18	.24	.53	.010	<0	60

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Oct										
16...	1.0	534	7.6	23.0	2.30	0	3.0	6.9	82	.6
16...	5.0	545	7.5	22.5	--	--	--	7.3	86	--
16...	13.0	598	6.9	22.0	--	0	2.0	8.0	94	.4

Table 41.--Chemical-quality survey of Town Lake, October 16, 1978--Continued

301712097470701 SITE Ec--Continued

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 um-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)
Oct											
16...	2,300	20	<1	180	46	41	20	33	1	3.9	170
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	290	39	78	22	13	.3	1.3	300

Date	Alkalinity, field (mg/L CaCO3)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)
Oct											
16...	139	0	37	63	.20	9.7	290	2	1	.04	.010
16...	--	--	--	--	--	--	--	--	--	--	--
16...	246	0	33	24	.20	10	330	0	0	.51	.010

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)
Oct											
16...	.05	.010	.49	.50	.55	.010	2	<100	ND	ND	4
16...	--	--	--	--	--	--	--	--	--	--	--
16...	.52	.010	.88	.89	1.4	.010	<1	<100	<2	ND	6

Date	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)
Oct											
16...	<10	ND	<10	<.1	<1	ND	<20	<.0	<.00	<.00	<.0
16...	--	--	--	--	--	--	--	--	--	--	--
16...	<10	ND	<10	<.1	1	ND	<20	--	--	--	--

Date	DDD, total (µg/L)	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)
Oct											
16...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--

Date	Malathion, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Oct											
16...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.03	<.00	<.00
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--

Table 41.--Chemical-quality survey of Town Lake, October 16, 1978--Continued

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct 16...	1.0	694	7.2	21.5	9.1	106

Table 42.--Chemical-quality survey of Town Lake, February 07, 1979

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; ND, not detected; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
07...	1.0	539	7.9	12.0	9.5	92
07...	10.0	529	7.9	11.0	9.5	90
07...	19.0	500	7.7	11.0	9.3	88

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Feb										
07...	1.0	539	7.9	12.5	1.90	0	3.0	9.5	93	.7
07...	10.0	529	7.8	12.0	--	--	--	9.5	92	--
07...	20.0	510	7.6	11.0	--	--	--	9.4	89	--
07...	25.0	508	7.7	11.0	--	0	5.0	9.5	90	.6

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)
Feb											
07...	720	64	92	240	40	65	18	18	.5	1.9	240
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	220	32	62	16	18	.5	1.8	230

Date	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)
Feb											
07...	197	0	36	35	.20	7.6	300	4	1	.36	.020
07...	--	--	--	--	--	--	--	--	--	.51	<.010
07...	--	--	--	--	--	--	--	--	--	--	--
07...	189	0	34	32	.20	7.1	280	6	2	.13	.020

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)
Feb											
07...	.38	.020	.21	.23	.61	.030	1	<100	ND	ND	4
07...	.51	.040	.22	.26	.77	.030	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	.15	.020	.24	.26	.41	.040	1	<100	ND	ND	4

Table 42.--Chemical-quality survey of Town Lake, February 07, 1979--Continued

301500097424801 SITE Ac--Continued

Date	Iron, dis-solved (µg/L)	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Sele-nium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)	DDD, total (µg/L)
Feb											
07...	<10	ND	<10	<.1	<1	ND	<20	<.0	<.00	<.0	<.00
07...	<10	--	<10	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	<10	2	<10	<.1	<1	ND	<20	<.0	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endo-sulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)	Lindane, total (µg/L)	Mala-thion, total (µg/L)
Feb											
07...	<.00	<.00	.01	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	<.00	.01	.03	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	Mirex, total (µg/L)	Para-thion, total (µg/L)	Per-thane, total (µg/L)	Tox-aphene, total (µg/L)	Tri-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Feb										
07...	<.00	<.00	<.00	<.00	<.0	0	<.00	.09	<.00	<.00
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	<.00	<.00	<.00	<.00	<.0	0	<.00	.09	<.00	<.00

301503097424701 SITE Al

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Feb						
07...	1.0	539	7.8	12.0	9.7	92
07...	10.0	510	7.6	11.0	9.7	94
07...	19.0	500	7.6	11.0	10.0	94

301500097440801 SITE Br

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Feb						
07...	1.0	484	7.7	10.0	10.1	94
07...	10.0	484	7.7	10.0	10.2	94
07...	16.0	484	7.7	10.0	10.1	94

Table 42.--Chemical-quality survey of Town Lake, February 07, 1979--Continued

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
07...	1.0	484	7.7	10.0	10.1	94
07...	10.0	484	7.7	10.0	10.1	94
07...	20.0	484	7.7	10.0	10.2	94
07...	28.0	484	7.7	10.0	10.4	96

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
07...	1.0	532	7.7	10.0	10.3	95
07...	8.0	532	7.7	10.0	10.3	95

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
07...	1.0	532	7.7	10.0	10.3	95
07...	10.0	532	7.7	10.0	10.6	98
07...	16.0	532	7.7	10.0	11.2	104

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
07...	1.0	536	7.8	10.0	10.6	98
07...	11.0	536	7.8	9.5	10.7	97

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Feb										
07...	1.0	536	7.8	9.5	2.10	0	3.0	11.1	101	.2
07...	10.0	548	7.9	9.0	--	--	--	11.1	100	--
07...	18.0	548	7.9	9.0	--	0	2.0	11.6	105	.5

Table 42.--Chemical-quality survey of Town Lake, February 07, 1979--Continued

301558097452201 SITE Dc--Continued

Date	Coli-form, total, (cols./ 100 mL)	Coli-form, fecal, 0.7 µm-MF (cols./ 100 mL)	Strep-tococci, fecal, KF Agar (cols./ 100 mL)	Hard-ness (mg/L $CaCO_3$)	Hard-ness, noncar-bonate (mg/L $CaCO_3$)	Calcium, dis-solved (mg/L)	Magne-sium, dis-solved (mg/L)	Sodium, dis-solved (mg/L)	Sodium ad-sorp-tion ratio	Potas-sium, dis-solved (mg/L)
Feb										
07...	K80	39	120	220	45	57	20	23	.7	2.4
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	210	48	52	20	28	.9	2.7

Date	Bicar-bonate, fet-fld (mg/L)	Alka-linity, field (mg/L $CaCO_3$)	Car-bonate, fet-fld (mg/L)	Sulfate, dis-solved (mg/L)	Chlo-ride, dis-solved (mg/L)	Fluo-ride, dis-solved (mg/L)	Silica, dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, residue at 105 °C, sus-pended (mg/L)	Solids, vola-tile, sus-pended (mg/L)
Feb										
07...	220	180	0	38	42	.20	7.3	300	4	1
07...	--	--	--	--	--	--	--	--	--	--
07...	200	164	0	43	53	.20	7.1	300	2	1

Date	Nitro-gen, nitrate, total (mg/L)	Nitro-gen, nitrite, total (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)	Nitro-gen, ammonia, total (mg/L)	Nitro-gen, organic, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Nitro-gen, total (mg/L)	Phos-phorus, total (mg/L)	Iron, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)
Feb										
07...	.19	.020	.21	.020	.27	.29	.50	.020	<10	20
07...	.04	.020	.06	.010	.27	.28	.34	.010	<10	<10
07...	.05	.020	.07	.020	.25	.27	.34	.020	<10	30

301712097470701 SITE Ec

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Trans-par-ency (secchi disk) (m)	Color (plat-inum-cobalt units)	Tur-bid-ity (NTU)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)	Oxygen demand, bio-chem-ical, 5-day (mg/L)
Feb										
07...	1.0	552	7.9	9.5	2.40	0	2.0	11.6	105	.9
07...	10.0	549	8.2	9.0	--	--	--	12.0	108	--
07...	19.0	546	8.3	8.0	--	2	2.0	12.4	109	.8

Date	Coli-form, total, (cols./ 100 mL)	Coli-form, fecal, 0.7 µm-MF (cols./ 100 mL)	Strep-tococci, fecal, KF Agar (cols./ 100 mL)	Hard-ness (mg/L $CaCO_3$)	Hard-ness, noncar-bonate (mg/L $CaCO_3$)	Calcium, dis-solved (mg/L)	Magne-sium, dis-solved (mg/L)	Sodium, dis-solved (mg/L)	Sodium ad-sorp-tion ratio	Potas-sium, dis-solved (mg/L)	Bicar-bonate, fet-fld (mg/L)
Feb											
07...	76	K9	22	210	50	51	21	30	.9	2.8	200
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	210	59	48	21	31	1	3.0	180

Table 42.--Chemical-quality survey of Town Lake, February 07, 1979--Continued

301712097470701 SITE Ec--Continued

Date	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)
Feb											
07...	164	0	43	56	.20	7.4	310	3	1	.13	.020
07...	--	--	--	--	--	--	--	--	--	.08	<.010
07...	148	0	44	60	.30	7.2	300	2	1	.05	.020

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)
Feb											
07...	.15	.010	.30	.31	.46	.020	1	<100	ND	ND	<2
07...	.08	.010	.31	.32	.40	.010	--	--	--	--	--
07...	.07	.010	.31	.32	.39	.020	1	<100	ND	ND	2

Date	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
Feb											
07...	<10	ND	<10	<.1	<1	ND	<20	<.0	<.00	<.0	<.00
07...	<10	--	<10	--	--	--	--	--	--	--	--
07...	<10	<2	<10	<.1	<1	ND	<20	<.0	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
Feb											
07...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
07...	--	--	--	--	--	--	--	--	--	--	--
07...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Feb										
07...	<.00	<.00	<.00	<.00	<.0	0	<.00	.08	<.00	<.00
07...	--	--	--	--	--	--	--	--	--	--
07...	<.00	<.00	<.00	<.00	<.0	0	<.00	.11	<.00	<.00

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
07...	1.0	497	7.8	11.5	11.8	112
07...	3.0	497	7.8	11.5	11.8	112

Table 43.--Chemical-quality survey of Town Lake, May 29, 1979

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <,less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
29...	1.0	523	7.6	21.0	7.0	78
29...	10.0	523	7.5	20.5	5.8	64
29...	21.0	523	7.4	20.0	4.6	51

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
29...	1.0	537	7.6	21.5	1.20	5	2.5	7.3	83	.5
29...	10.0	537	7.6	20.5	--	--	--	7.6	84	--
29...	20.0	545	7.6	20.0	--	--	--	7.8	87	--
29...	26.0	547	7.6	20.0	--	5	3.5	7.9	87	.4

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
May										
29...	5,000	180	55	200	38	48	20	28	.9	3.3
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	200	38	46	21	30	.9	3.4

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
May										
29...	200	164	0	35	46	.20	8.0	290	3	0
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	200	164	0	33	48	.20	8.1	290	8	6

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May										
29...	.31	.020	.33	.050	.30	.35	.68	.020	<0	8
29...	.29	.020	.31	.050	.27	.32	.63	.020	<10	<10
29...	--	--	--	--	--	--	--	--	--	--
29...	.26	.020	.28	.050	.22	.27	.55	.030	<10	<10

Table 43.--Chemical-quality survey of Town Lake, May 29, 1979--Continued

301503097424701 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
29...	1.0	542	7.6	21.5	7.4	84
29...	10.0	542	7.6	20.0	7.6	84
29...	16.0	542	7.6	20.0	7.7	85

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
29...	1.0	542	7.7	20.5	7.9	88
29...	10.0	542	7.7	20.0	7.9	87
29...	16.0	542	7.7	20.0	7.9	87

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
29...	1.0	542	7.7	20.5	7.9	88
29...	10.0	542	7.7	20.0	7.9	87
29...	20.0	542	7.7	19.5	7.6	83
29...	25.0	542	7.7	19.5	7.6	83

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (°S/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
29...	1.0	544	7.6	20.0	7.7	85
29...	10.0	544	7.6	20.0	7.7	85

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
29...	1.0	542	7.6	20.5	7.8	86
29...	10.0	542	7.6	20.0	7.8	86
29...	18.0	542	7.6	20.0	7.8	86

Table 43.--Chemical-quality survey of Town Lake, May 29, 1979--Continued

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissovled (percent saturation)
May						
29...	1.0	544	7.5	20.5	7.5	83
29...	11.0	544	7.6	20.0	7.5	83

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
29...	1.0	544	7.4	21.0	2.10	3	1.1	7.9	89	.6
29...	10.0	544	7.7	20.0	--	--	--	7.7	86	--
29...	18.0	544	7.7	20.0	--	5	2.5	7.7	86	.6

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
May										
29...	950	140	79	220	28	57	20	24	.7	2.5
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	200	41	44	21	31	1	3.5

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
May										
29...	240	197	0	26	31	.20	9.0	290	7	5
29...	--	--	--	--	--	--	--	--	--	--
29...	190	156	0	31	50	.20	7.8	280	0	0

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May										
29...	.46	.020	.48	.020	.25	.27	.75	.010	<0	9
29...	.24	.020	.26	.030	.27	.30	.56	.010	<10	<10
29...	.22	.020	.24	.030	.33	.36	.60	.020	<10	7

Table 43.--Chemical-quality survey of Town Lake, May 29, 1979--Continued

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
29...	1.0	539	7.9	20.5	1.30	3	.50	8.5	94	.5
29...	10.0	540	7.9	20.5	--	--	--	8.5	94	--
29...	18.0	540	7.9	20.0	--	5	.80	8.5	93	.4

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 um-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
May										
29...	260	16	7	190	39	45	20	32	1	3.6
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	190	36	44	20	32	1	3.6

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
May										
29...	190	156	0	39	53	.30	7.3	290	5	4
29...	--	--	--	--	--	--	--	--	--	--
29...	190	156	0	39	53	.30	7.3	290	4	3

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May										
29...	.19	.020	.21	.020	.26	.28	.49	.010	<0	<1
29...	.16	.020	.18	.020	.27	.29	.47	.010	<10	<10
29...	.18	.020	.20	.030	.24	.27	.47	.010	<0	<1

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
29...	1.0	519	7.6	23.5	11.5	134
29...	7.0	540	7.8	21.0	8.5	96

Table 44.--Chemical-quality survey of Town Lake, July 27, 1979

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; ND, not detected]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
27...	1.0	500	7.6	26.0	6.4	79
27...	10.0	397	7.6	25.5	6.2	76
27...	20.0	379	7.5	25.0	5.8	71

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
July										
27...	1.0	344	7.5	25.0	.20	15	78	6.3	77	2.0
27...	10.0	318	7.5	25.0	--	--	--	6.3	77	--
27...	22.0	313	7.5	25.0	--	15	74	6.5	79	2.3

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)
July											
27...	43,000	12,000	15,000	120	17	33	10	17	.7	2.9	130
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	120	22	32	9.8	16	.7	2.8	120

Date	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)
July											
27...	107	0	23	27	.20	5.5	180	92	16	.25	.020
27...	--	--	--	--	--	--	--	--	--	.20	.020
27...	98	0	21	24	.20	5.1	170	120	24	.13	.020

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)
July											
27...	.27	.040	.57	.61	.88	.340	2	<100	<2	ND	ND
27...	.22	.020	.36	.38	.60	.190	--	--	--	--	--
27...	.15	.020	.53	.55	.55	.190	2	<100	ND	ND	<2

Table 44.--Chemical-quality survey of Town Lake, July 27, 1979--Continued

301500097424801 SITE Ac--Continued

Date	Iron, dissolved (μg/L	Lead, dissolved (μg/L	Manganese, dissolved (μg/L	Mercury, dissolved (μg/L	Selenium, dissolved (μg/L	Silver, dissolved (μg/L)	Zinc, dissolved (μg/L	PCB, total (μg/L)	Aldrin, total (μg/L)	Chlordane, total (μg/L)	DDD, total (μg/L)
July											
27...	<10	<2	<10	<.1	<1	ND	20	0	<.00	.1	.01
27...	30	--	<10	--	--	--	--	--	--	--	--
27...	<10	2	<10	<.1	<1	ND	20	0	<.00	.1	.01

Date	DDE, total (μg/L)	DDT, total (μg/L)	Diazinon, total (μg/L)	Dieldrin, total (μg/L)	Endosulfan, total (μg/L)	Endrin, total (μg/L)	Ethion, total (μg/L)	Heptachlor, total (μg/L)	Heptachlor epoxide, total (μg/L)	Lindane, total (μg/L)	Malathion, total (μg/L)
July											
27...	.03	<.00	.20	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
27...	--	--	--	--	--	--	--	--	--	--	--
27...	.04	.07	.24	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (μg/L)	Methyl trithion, total (μg/L)	Mirex, total (μg/L)	Parathion, total (μg/L)	Perthane, total (μg/L)	Toxaphene, total (μg/L)	Trithion, total (μg/L)	2,4-D, total (μg/L)	2,4,5-T, total (μg/L)	Silvex, total (μg/L)
July										
27...	.03	<.00	<.00	<.00	<.0	0	<.00	<.00	.01	<.00
27...	--	--	--	--	--	--	--	--	--	--
27...	.04	<.00	<.00	<.00	<.0	0	<.00	<.00	.01	<.00

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
27...	1.0	344	7.50	25.5	6.2	76
27...	10.0	318	7.50	25.0	6.4	78
27...	16.0	313	7.50	25.0	6.3	77

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
27...	1.0	372	7.40	24.5	6.7	81
27...	13.0	367	7.40	24.5	6.6	80

Table 44.--Chemical-quality survey of Town Lake, July 27, 1979--Continued

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
27...	1.0	324	7.40	24.5	6.9	83
27...	10.0	324	7.40	24.5	6.9	83
27...	21.0	322	7.40	24.5	6.7	81

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
27...	1.0	435	7.50	24.5	6.5	78
27...	9.0	435	7.50	24.5	6.4	77

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
27...	1.0	333	7.60	24.5	7.1	86
27...	10.0	323	7.60	24.5	7.1	86
27...	18.0	323	7.60	24.5	7.1	86

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
27...	1.0	480	7.50	25.0	6.4	78
27...	9.0	480	7.50	24.5	6.4	77

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
July										
27...	1.0	462	7.50	25.0	.40	10	14	6.4	78	0.8
27...	10.0	473	7.50	24.5	--	--	--	6.3	76	--
27...	20.0	477	7.40	24.5	--	10	10	6.0	72	1.0

Table 44.--Chemical-quality survey of Town Lake, July 27, 1979--Continued

301558097452201 SITE Dc--Continued

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
July 27...	20,000	9,900	8,800	180	45	44	18	23	.8	3.2
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	190	38	45	18	23	.8	3.2

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
July 27...	170	139	0	31	39	.20	7.6	250	18	8
27...	--	--	--	--	--	--	--	--	--	--
27...	180	148	0	31	38	.20	7.7	250	13	7

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
July 27...	.38	.060	.44	.040	.75	.79	1.2	.120	<10	20
27...	.16	.020	.18	.020	.34	.36	.54	.130	20	20
27...	.22	.020	.24	.060	.29	.34	.58	.100	20	20

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
July 27...	1.0	523	7.20	22.5	5	4.6	7.3	85	.4	800
27...	12.0	531	7.60	21.5	5	3.3	7.0	80	.8	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
July 27...	680	180	230	41	56	22	20	.6	2.5	230	189
27...	--	--	200	39	42	22	28	.9	3.6	190	156

Table 44.--Chemical-quality survey of Town Lake, July 27, 1979--Continued

301712097470701 SITE Ec--Continued

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
July											
27...	0	31	35	.20	8.6	290	4	4	.32	.020	.34
27...	0	36	51	.30	7.9	280	5	5	.16	.020	.18

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, solved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
July											
27...	<.010	.47	.47	.81	.060	1	<100	<2	ND	ND	<10
27...	.010	.45	.46	.64	.070	1	<100	ND	ND	ND	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
July											
27...	ND	<10	<.1	<1	ND	20	<.0	<.00	<.0	<.00	<.00
27...	ND	<10	<.1	<1	ND	20	<.0	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
July										
27...	<.00	.01	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
27...	<.00	<.0	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
July										
27...	<.00	<.00	<.00	<.00	<.0	0	<.00	.15	<.00	<.00
27...	<.00	<.00	<.00	<.00	<.0	0	<.00	.29	<.00	<.00

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
27...	1.0	495	7.10	22.5	6.8	79
27...	4.0	495	7.10	22.5	6.8	79

Table 45.--Chemical-quality survey of Town Lake, August 22, 1979.

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter NTU, nephelometric turbidity unit; fet-fld, fixed end point titration; m, meters; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; NO2+NO4, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
22...	1.0	544	7.6	24.5	6.9	83
22...	10.0	544	7.6	23.0	6.4	75
22...	24.0	544	7.5	22.5	6.2	72

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Aug									
22...	1.0	544	7.6	23.5	3	.80	6.9	82	--
22...	10.0	544	7.6	23.5	--	--	6.9	82	--
22...	20.0	544	7.5	23.0	--	--	6.5	76	--
22...	24.0	544	7.5	23.0	5	.90	6.2	73	.2

Date	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Aug									
22...	200	38	46	21	29	.9	3.4	200	164
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	210	53	49	21	31	1	3.3	190	156

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
Aug									
22...	0	37	53	.30	8.5	300	16	10	.22
22...	--	--	--	--	--	--	--	--	.22
22...	--	--	--	--	--	--	--	--	--
22...	0	38	53	.20	8.7	300	11	0	.23

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Aug									
22...	.020	.24	.110	<.00	.10	.34	<.010	<10	7
22...	.020	.24	.020	<.00	.02	.26	.010	<10	20
22...	--	--	--	--	--	--	--	--	--
22...	.020	.25	.030	.03	.06	.31	<.010	<10	20

Table 45.--Chemical-quality survey of Town Lake, August 22, 1979--Continued

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
22...	1.0	544	7.7	24.0	6.9	82
22...	10.0	544	7.6	23.0	6.5	76
22...	17.0	544	7.6	23.0	6.4	75

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
22...	1.0	544	7.6	22.5	6.4	74
22...	10.0	544	7.6	22.5	6.3	73
22...	14.0	544	7.6	22.5	6.2	72

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
22...	1.0	544	7.6	23.0	6.7	79
22...	10.0	544	7.6	22.5	6.2	72
22...	20.0	544	7.5	22.0	6.1	70

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (per cent saturation)
Aug						
22...	1.0	554	7.5	21.5	5.9	67
22...	8.0	554	7.5	21.5	5.8	66

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standare units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
22...	1.0	554	7.5	23.0	6.1	72
22...	10.0	554	7.5	21.5	5.8	66
22...	13.0	554	7.5	21.5	5.8	66

Table 45.--Chemical-quality survey of Town Lake, August 22, 1979--Continued

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
22...	1.0	554	7.4	22.5	6.0	70
22...	11.0	554	7.3	21.5	5.8	66

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Aug										
22...	1.0	548	7.5	21.5	2.10	5	1.7	6.1	69	<.0
22...	10.0	546	7.5	21.5	--	--	--	5.9	67	--
22...	20.0	544	7.5	21.5	--	5	1.0	5.7	65	<.0

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Aug										
22...	38	37	5	210	45	49	21	28	.9	3.4
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	200	48	47	21	29	.9	3.5

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Aug										
22...	200	164	0	37	52	.30	8.6	300	9	26
22...	--	--	--	--	--	--	--	--	--	--
22...	190	156	0	38	54	.30	8.6	290	2	13

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Aug										
22...	.34	<.010	.34	.020	.03	.05	.39	<.010	<10	9
22...	.27	.020	.29	.030	.01	.04	.33	.010	<10	<10
22...	.23	.020	.25	.020	.06	.08	.33	<.010	<10	9

Table 45.--Chemical-quality survey of Town Lake, August 22, 1979--Continued

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency, (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Aug										
22...	1.0	539	7.6	21.5	1.40	3	1.4	6.2	70	.1
22...	10.0	539	7.6	22.0	--	--	--	6.2	71	--
22...	14.0	539	7.6	22.0	--	3	1.6	6.1	70	.1

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Aug										
22...	15	8	3	200	43	45	21	30	1	3.6
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	200	48	47	21	32	1	3.2

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Aug										
22...	190	156	0	39	56	.30	8.3	300	21	15
22...	--	--	--	--	--	--	--	--	--	--
22...	190	156	0	39	54	.20	8.5	300	4	5

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Aug										
22...	.18	.020	.20	.010	.01	.02	.22	<.010	<10	2
22...	--	--	--	--	--	--	--	--	--	--
22...	.18	.020	.20	.010	.56	.57	.77	<.010	<10	2

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
22...	1.0	610	7.1	23.0	9.4	111
22...	5.0	610	7.1	23.0	9.2	108

Table 46.--Chemical-quality survey of Town Lake, March 03, 1980

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
03...	1.0	500	7.8	14.0	8.7	84
03...	10.0	500	7.8	14.0	8.7	84
03...	25.0	500	7.8	14.0	8.7	84

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
Mar											
03...	1.0	515	7.8	14.0	2.30	0	1.9	8.8	85	.1	780
03...	10.0	515	7.8	14.0	--	--	--	8.8	85	--	--
03...	22.0	515	7.8	14.0	--	2	2.0	8.8	85	.3	--

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Mar											
03...	8	2	210	38	51	20	26	.8	2.8	210	172
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	210	38	51	20	27	.8	2.8	210	172

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Mar											
03...	0	36	40	.20	7.3	290	0	0	.19	.010	.20
03...	--	--	--	--	--	--	--	--	.15	.010	.16
03...	0	34	41	.20	7.2	290	2	2	.27	.010	.28

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Mar											
03...	.070	.33	.40	.60	.020	1	60	<1	0	5	<10
03...	.070	.33	.40	.56	.030	--	--	--	--	--	10
03...	.100	.53	.63	.91	.030	1	60	<1	0	5	<10

Table 46.--Chemical-quality survey of Town Lake, March 03, 1980--Continued

301500097424801 SITE Ac--Continued

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
Mar											
03...	0	3	.2	0	0	6	<.0	<.00	<.00	<.0	<.00
03...	--	10	--	--	--	--	--	--	--	--	--
03...	0	3	.4	0	0	<3	<.0	<.00	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
Mar											
03...	<.00	<.00	.01	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
03...	--	--	--	--	--	--	--	--	--	--	--
03...	<.00	<.00	.01	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methoxychlor, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Mar											
03...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.02	<.00	<.00
03...	--	--	--	--	--	--	--	--	--	--	--
03...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.03	<.00	<.00

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
03...	1.0	520	7.8	14.0	8.7	84
03...	10.0	520	7.8	14.0	8.7	84
03...	15.0	520	7.8	14.0	8.8	85

301500097440801 SITE Br

Date	Sampling-depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
03...	1.0	555	7.7	14.0	8.7	84
03...	13.0	555	7.7	14.0	8.4	82

Table 46.--Chemical-quality survey of Town Lake, March 03, 1980--Continued

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
03...	1.0	555	7.7	14.0	8.5	83
03...	10.0	555	7.7	14.0	8.5	83
03...	20.0	555	7.7	14.0	8.4	82
03...	25.0	555	7.7	14.0	8.4	82

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
03...	1.0	588	7.6	14.0	10.7	104
03...	8.0	588	7.6	14.0	10.7	104

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
03...	1.0	588	7.6	14.0	10.5	102
03...	10.0	588	7.6	14.0	10.5	102
03...	15.0	588	7.6	14.0	10.5	102

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
03...	1.0	569	7.7	14.0	10.8	105
03...	10.0	569	7.7	14.0	10.8	105
03...	15.0	569	7.7	14.0	10.9	106

Table 46.--Chemical-quality survey of Town Lake, March 03, 1980--Continued

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Mar										
03...	1.0	569	7.8	14.0	5.5	2	1.3	10.7	104	.6
03...	10.0	569	7.8	14.0	--	--	--	10.7	104	--
03...	18.0	569	7.8	14.0	--	5	.80	10.6	103	.1

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Mar										
03...	440	82	49	260	0	65	23	23	.6	2.2
03...	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	250	39	63	23	22	.6	2.2

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO3)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105, °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Mar										
03...	260	260	0	34	37	.20	5.4	320	0	0
03...	--	--	--	--	--	--	--	--	--	--
03...	260	213	0	46	36	0	5.1	330	0	0

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar										
03...	.50	.010	.51	.030	.26	.29	.80	<.000	<10	4
03...	.53	.010	.54	.010	.85	.86	1.4	<.000	10	10
03...	.28	.010	.29	.010	.36	.37	.66	.020	<10	4

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
Mar											
03...	1.0	527	7.9	12.5	1.40	2	2.6	9.8	92	.6	820
03...	12.0	527	7.8	12.5	--	5	3.3	9.9	93	.2	--

Table 46.--Chemical-quality survey of Town Lake, March 03, 1980--Continued

301712097470701 SITE Ec--Continued

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Mar 03...	6	12	210	43	48	23	27	.8	3.3	210	172
03...	--	--	220	48	50	23	25	.8	3.2	210	172

Date	Carbonate fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
Mar 03...	0	42	43	.20	8.1	300	6	5	.10	<.000	.10
03...	0	35	43	.20	7.8	290	0	0	.09	.010	.10

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Mar 03...	.030	.38	.41	.51	.010	1	70	<1	0	0	<10
03...	.030	.40	.43	.53	.010	1	70	2	0	0	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
Mar 03...	0	<1	.3	0	0	<3	<.0	<.00	<.00	<.0	<.00
03...	0	2	.5	0	0	4	<.0	<.00	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
Mar 03...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
03...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methoxychlor, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Mar 03...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.68	<.00	<.00
03...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.71	<.00	<.00

Table 46.--Chemical-quality survey of Town Lake, March 03, 1980--Continued

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar 03...	1.0	647	7.3	19.0	11.8	127

Table 47.--Chemical-quality survey of Town Lake, March 28, 1980

[µS/cm, microsiemens per centimeter at 25°; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./ mL , colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite nitrate; µg/L, micrograms per liter; ---, not determined; >, more than; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
28...	1.0	510	7.9	18.0	7.9	85
28...	10.0	515	7.9	17.0	7.9	83
28...	24.0	515	7.9	17.0	7.8	82

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Mar										
28...	1.0	477	7.8	18.0	.90	10	7.2	7.6	82	1.3
28...	10.0	491	7.8	17.0	--	--	--	7.6	80	--
28...	20.0	491	7.8	17.0	--	--	--	7.5	79	--
28...	23.0	491	7.7	17.0	--	5	3.6	7.5	79	1.2

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Mar										
28...	>2,000	2,000	780	190	35	45	19	23	.7	3.2
28...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	200	33	46	20	24	.8	3.2

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Mar										
28...	190	156	0	32	39	.30	7.2	260	0	0
28...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
28...	200	164	0	33	39	.30	7.3	270	5	6

Table 47.--Chemical-quality survey of Town Lake, March 28, 1980--Continued

301500097424801 SITE Ac--Continued

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphrous, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar										
28...	.12	.010	.13	.080	.60	.68	.81	.070	<10	3
28...	.04	<.000	.04	.040	.79	.83	.87	.050	30	0
28...	--	--	--	--	--	--	--	--	--	--
28...	.14	.010	.15	.100	.48	.58	.73	.040	<10	4

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
28...	1.0	477	7.8	18.5	7.5	82
28...	12.0	491	7.8	17.0	7.3	77

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
28...	1.0	301	7.6	17.0	7.1	75
28...	10.0	290	7.6	16.5	7.0	73
28...	13.0	290	7.6	16.5	7.0	73

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
28...	1.0	280	7.7	17.0	7.2	76
28...	10.0	301	7.7	16.5	7.2	75
28...	20.0	301	7.7	16.5	7.1	74

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
28...	1.0	489	7.4	20.0	6.7	74
28...	6.0	421	7.6	17.0	6.5	68

Table 47.--Chemical-quality survey of Town Lake, March 28, 1980--Continued

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
28...	1.0	454	7.5	19.5	7.1	78
28...	10.0	358	7.6	17.0	6.8	72
28...	15.0	328	7.6	17.0	6.7	71

301556097452301 SITE DR

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
28...	1.0	525	7.2	20.5	6.2	70
28...	11.0	480	7.6	17.0	6.1	--

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Mar									
28...	1.0	507	7.2	19.5	20	15	6.1	68	1.2
28...	10.0	480	7.7	17.0	--	--	6.8	72	--
28...	21.0	463	7.7	17.0	20	7.8	6.4	67	.9

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Mar										
28...	>4,600	4,600	7,200	230	42	61	19	18	.5	2.4
28...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	190	38	43	19	22	.7	3.2

Date	Bicarbonate fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Mar										
28...	230	189	0	31	30	.30	9.1	280	14	5
28...	--	--	--	--	--	--	--	--	--	--
28...	180	148	0	33	37	.30	7.5	250	10	8

Table 47.--Chemical-quality survey of Town Lake, March 28, 1980--Continued

301558097452201 SITE Dc--Continued

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar										
28...	.46	.010	.47	.060	.77	.83	1.3	.060	<10	8
28...	.11	<.000	.11	.060	.72	.78	.89	.040	40	10
28...	.10	.010	.11	.100	.77	.87	.98	.050	30	10

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Mar									
28...	1.0	505	7.3	19.0	10	3.0	7.5	82	.8
28...	12.0	488	7.6	17.5	10	2.9	6.4	68	1.0

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Mar										
28...	220	220	230	220	37	54	20	20	.6	2.6
28...	--	--	--	200	36	47	20	22	.7	3.1

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Mar										
28...	220	180	0	32	35	.30	8.2	280	0	0
28...	200	164	0	32	40	.30	8.2	270	0	0

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar										
28...	.43	<.000	.43	.040	.77	.81	1.2	.030	<10	3
28...	.13	<.000	.13	.080	2.7	2.8	2.9	.030	<10	20

Table 47.--Chemical-quality survey of Town Lake, March 28, 1980--Continued

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar 28...	1.0	607	7.2	22.5	11.7	136

Table 48.--Chemical-quality survey of Town Lake, May 19, 1980

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometeric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
19...	1.0	470	7.7	24.0	7.8	93
19...	10.0	449	7.6	22.5	6.4	74
19...	23.0	449	7.4	20.5	4.8	53

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
19...	1.0	470	7.7	23.5	1.37	5	2.6	7.8	92	1.0
19...	10.0	466	7.5	21.5	--	--	--	6.0	68	--
19...	20.0	463	7.4	20.5	--	--	--	4.9	54	--
19...	30.0	463	7.3	20.0	--	5	15	3.9	43	.5

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
May										
19...	3,100	200	43	210	33	57	17	15	.5	2.4
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	180	27	45	17	18	.6	2.8

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
May										
19...	220	180	0	25	22	.20	8.5	260	13	13
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	190	156	0	27	31	.20	8.3	240	24	15

Table 48.--Chemical-quality survey of Town Lake, May 19, 1980--Continued

301500097424801 SITE Ac--Continued

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May										
19...	.32	.010	.33	.030	.45	.48	.81	.010	<10	<3
19...	.22	.010	.23	.100	.90	1.0	1.2	.010	20	0
19...	--	--	--	--	--	--	--	--	--	--
19...	.17	.010	.18	.150	.73	.88	1.1	.050	<10	20

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
19...	1.0	479	7.7	24.0	8.0	95
19...	10.0	466	7.5	21.5	6.5	74
19...	17.0	463	7.4	20.5	5.1	57

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
19...	1.0	500	7.5	24.0	7.3	87
19...	12.0	496	7.4	22.5	5.9	68

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
19...	1.0	500	7.5	23.5	7.4	87
19...	10.0	498	7.4	22.5	6.6	77
19...	20.0	496	7.4	22.0	5.8	67
19...	25.0	496	7.4	22.0	5.9	68

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
19...	1.0	496	7.5	22.0	7.6	87
19...	9.0	496	7.5	21.5	7.6	86

Table 48.--Chemical-quality survey of Town Lake, May 19, 1980--Continued

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (per cent saturation)
May						
19...	1.0	496	7.5	21.5	7.7	88
19...	10.0	496	7.5	21.5	7.7	88
19...	19.0	496	7.4	21.5	7.8	89

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
19...	1.0	496	7.5	23.0	7.8	91
19...	13.0	496	7.5	21.5	7.3	83

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
19...	1.0	492	7.5	22.0	2.19	5	1.8	8.0	92	.4
19...	10.0	490	7.6	21.5	--	--	--	7.7	88	--
19...	19.0	490	7.6	21.5	--	0	6.7	7.7	88	.5

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
May										
19...	460	140	36	210	32	52	20	18	.6	2.6
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	200	33	49	20	19	.6	2.7

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
May										
19...	220	180	0	28	30	.20	8.2	270	14	15
19...	--	--	--	--	--	--	--	--	--	--
19...	210	172	0	29	35	.30	8.1	270	16	3

Table 48.--Chemical-quality survey of Town Lake, May 19, 1980--Continued

301558097452201 SITE Dc--Continued

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May										
19...	.21	.010	.22	.030	.34	.37	.59	.010	<10	10
19...	.13	.010	.14	.010	.44	.45	.59	.030	20	20
19...	.18	.010	.19	.030	.37	.40	.59	.010	<10	10

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
19...	1.0	483	7.8	21.5	1.52	5	2.9	8.3	94	.8
19...	10.0	483	7.8	21.5	--	--	--	8.2	93	--
19...	19.0	483	7.8	21.5	--	5	2.1	8.2	93	.8

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
May										
19...	10,000	44	10	200	33	46	20	20	.6	2.8
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	200	33	46	20	20	.6	2.9

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
May										
19...	200	164	0	28	33	.20	8.1	260	20	16
19...	--	--	--	--	--	--	--	--	--	--
19...	200	164	0	29	33	.20	8.1	260	126	4

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May										
19...	.18	.010	.19	.010	.43	.44	.63	.010	<10	<3
19...	.17	.010	.18	.010	.40	.41	.59	.020	10	0
19...	.17	.010	.18	.030	.26	.29	.47	.010	<10	4

Table 48.--Chemical-quality survey of Town Lake, May 19, 1980--Continued

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
19...	1.0	496	7.6	23.5	9.5	112
19...	8.0	496	7.6	23.5	9.5	112

Table 49.--Chemical-quality survey of Town Lake, July 31, 1980

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometeric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; fet-fld, fixed end point titration; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July 31...	1.0	492	7.8	26.0	7.0	86
31...	10.0	492	7.8	24.5	7.3	87
31...	15.0	492	7.8	24.0	7.2	86
31...	24.0	492	7.8	24.0	7.0	83

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)
July 31...	1.0	492	7.8	26.0	2.29	0	1.2	7.0	86	.6	620
31...	10.0	492	7.8	24.0	--	--	--	7.3	87	--	--
31...	15.0	492	7.8	24.0	--	--	--	7.0	83	--	--
31...	23.0	492	7.8	24.0	--	0	.90	7.0	83	.3	--

Date	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
July 31...	440	K3	--	--	--	--	--	--	3.0	200	164
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	200	33	44	21	24	.8	3.0	200	164

Date	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)
July 31...	0	--	--	--	--	--	0	0	.12	.010	.13
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	0	30	44	.30	8.8	270	1	1	.11	.010	.12

Table 49.--Chemical-quality survey of Town Lake, July 31, 1980--Continued

301500097424801 SITE Ac--Continued

Date	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
July											
31...	.030	.59	.62	.75	.010	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	.030	.64	.67	.79	.010	1	60	<1	0	0	<10

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)
July											
31...	--	--	--	--	--	--	<.0	<.00	<.00	<.0	<.00
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	0	5	.2	0	0	<3	<.0	<.00	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)
July											
31...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methoxychlor, total (µg/L)	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
July											
31...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.15	<.00	<.00
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.20	<.00	<.00

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
31...	1.0	492	7.8	26.0	7.3	90
31...	10.0	492	7.8	24.0	7.3	87
31...	17.0	492	7.8	24.0	7.3	87

Table 49.--Chemical-quality survey of Town Lake, July 31, 1980--Continued

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
31...	1.0	492	7.8	24.5	7.1	85
31...	10.0	492	7.8	24.0	7.1	85
31...	21.0	492	7.8	24.0	7.1	85

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
31...	1.0	492	7.8	25.0	7.2	87
31...	10.0	492	7.8	24.0	7.1	85
31...	20.0	492	7.8	24.0	7.0	83
31...	28.0	492	7.8	24.0	6.9	82

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
31...	1.0	496	7.7	23.0	6.8	79
31...	8.0	496	7.7	23.0	6.8	79

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
31...	1.0	496	7.7	24.0	6.9	82
31...	10.0	492	7.8	23.5	6.9	80
31...	14.0	492	7.8	23.5	6.7	79

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
31...	1.0	500	7.6	23.5	7.3	86
31...	12.0	500	7.7	23.0	6.8	79

Table 49.--Chemical-quality survey of Town Lake, July 31, 1980--Continued

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
July										
31...	1.0	492	7.8	22.5	2.29	0	.80	6.7	77	.4
31...	10.0	492	7.8	22.5	--	--	--	6.7	77	--
31...	22.0	492	7.8	22.5	--	0	1.1	6.6	76	.4

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
July										
31...	460	100	K14	190	25	41	21	25	.8	3.3
31...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	190	25	41	21	25	.8	3.3

Date	Bicarbonate, fet-fld (mg/L)	Alkalinity, field (mg/L CaCO$_3$)	Carbonate, fet-fld (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
July										
31...	200	164	0	29	45	.30	8.2	270	0	0
31...	--	--	--	--	--	--	--	--	--	--
31...	200	164	0	29	44	.30	8.3	270	0	0

Date	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
July										
31...	.09	<.000	.09	.010	.58	.59	.68	.010	<10	8
31...	.09	.010	.10	.010	.99	1.0	1.1	.010	0	10
31...	.09	.010	.10	.010	.95	.96	1.1	.010	<10	8

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)
July											
31...	1.0	492	7.9	23.0	1.43	0	1.3	7.4	86	.5	100
31...	10.0	492	7.8	22.5	--	--	--	6.9	79	--	--
31...	15.0	492	7.8	22.5	--	0	3.3	6.9	80	.5	--

Table 49.--Chemical-quality survey of Town Lake, July 31, 1980--Continued

301712097470701 SITE Ec--Continued

Date	Coli-form, fecal, 0.7 µm-MF (cols./100 mL)	Strep-tococci, fecal, KF Agar (cols./100 mL)	Hard-ness (mg/L $CaCO_3$)	Hard-ness. noncar-bonate (mg/L $CaCO_3$)	Calcium, dis-solved (mg/L)	Magne-sium, dis-solved (mg/L)	Sodium, dis-solved (mg/L)	Sodium ad-sorp-tion ratio	Potas-sium, dis-solved (mg/L)	Bicar-bonate, fet-fld (mg/L)	Alka-linity, field (mg/L $CaCO_3$)
July 31...	28	K4	190	30	43	21	24	.8	3.2	200	164
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	190	23	42	20	23	.8	3.2	200	164

Date	Car-bonate, fet-fld (mg/L)	Sulfate, dis-solved (mg/L)	Chlo-ride, dis-solved (mg/L)	Fluo-ride, dis-solved (mg/L)	Silica, dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, residue at 105 °C, sus-pended (mg/L)	Solids, vola-tile, sus-pended (mg/L)	Nitro-gen, nitrate, total (mg/L)	Nitro-gen, nitrite, total (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)
July 31...	0	29	45	.30	8.7	270	1	0	.08	.010	.09
31...	--	--	--	--	--	--	--	--	--	--	--
31...	0	30	45	.30	8.7	270	3	1	.08	.010	.09

Date	Nitro-gen, ammonia, total (mg/L)	Nitro-gen, organic, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Nitro-gen, total (mg/L)	Phos-phorus, total (mg/L)	Arsenic, dis-solved (µg/L)	Barium, dis-solved (µg/L)	Cadmium, dis-solved (µg/L)	Chro-mium, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)
July 31...	<.000	.51	.51	.60	.010	1	60	3	0	0	<10
31...	--	--	--	--	--	--	--	--	--	--	--
31...	<.000	.64	.64	.73	.010	1	60	<1	0	0	<10

Date	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Sele-nium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	PCB, total (µg/L)	Naph-tha-lenes, poly-chlor., total (µg/L)	Aldrin, total (µg/L)	Chlor-dane, total (µg/L)	DDD, total (µg/L)
July 31...	0	1	.6	0	0	<3	<.0	<.00	<.00	<.0	<.00
31...	--	--	--	--	--	--	--	--	--	--	--
31...	0	<1	.9	0	0	<3	<.0	<.00	<.00	<.0	<.00

Date	DDE, total (µg/L)	DDT, total (µg/L)	Di-azinon, total (µg/L)	Di-eldrin, total (µg/L)	Endo-sulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Hepta-chlor, total (µg/L)	Hepta-chlor epoxide, total (µg/L)	Lindane, total (µg/L)	Mala-thion, total (µg/L)
July 31...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
31...	--	--	--	--	--	--	--	--	--	--	--
31...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Meth-oxy-chlor, total (µg/L)	Methyl para-thion, total (µg/L)	Methyl tri-thion, total (µg/L)	Mirex, total (µg/L)	Para-thion, total (µg/L)	Per-thane, total (µg/L)	Tox-aphene, total (µg/L)	Tri-thion, total (µg/L)	2,4-D, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
July 31...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.29	<.00	<.00
31...	--	--	--	--	--	--	--	--	--	--	--
31...	<.00	<.00	<.00	<.00	<.00	<.0	0	<.00	.27	<.00	<.00

Table 49.--Chemical-quality survey of Town Lake, July 31, 1980--Continued

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µs/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
July						
31...	1.0	631	7.2	23.5	10.7	126
31...	6.0	631	7.2	23.0	10.4	121

Table 50.--Chemical-quality survey of Town Lake, March 04, 1981

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
04...	1.0	454	7.9	16.5	8.3	86
04...	10.0	456	7.9	16.5	8.3	86
04...	20.0	458	7.9	16.5	8.3	86

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Mar										
04...	1.0	447	7.9	16.5	.20	10	57	8.0	83	1.0
04...	10.0	447	7.9	16.5	--	--	--	8.1	84	--
04...	20.0	447	7.9	16.5	--	--	--	8.0	83	--
04...	28.0	447	7.9	16.5	--	10	66	9.2	96	1.1

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Mar											
04...	18,000	3,700	12,000	180	38	43	17	24	.8	3.0	140
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	190	48	47	17	25	.8	3.0	140

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Mar											
04...	37	45	.20	5.5	260	60	5	.25	.020	.27	.040
04...	--	--	--	--	--	--	--	.03	.240	.27	.030
04...	--	--	--	--	--	--	--	--	--	--	--
04...	36	44	.20	5.8	260	52	5	.02	.240	.26	.050

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)
Mar											
04...	.66	.70	.97	.100	2	60	<1	10	<10	20	<10
04...	1.1	1.1	1.4	.120	--	--	--	--	--	30	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	.67	.72	.98	.100	2	60	<1	0	<10	130	31

Table 50.--Chemical-quality survey of Town Lake, March 04, 1981--Continued

301500097424801 SITE Ac--Continued

Date	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Mar											
04...	2	<.0	0	0	5	<.0	<.00	<.00	<.0	<.00	<.00
04...	10	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	40	<.0	0	0	20	<.0	<.00	<.00	<.0	.01	.01

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methoxychlor, total (µg/L)
Mar											
04...	<.00	.04	<.00	<.00	<.00	<.00	.01	<.00	<.00	.01	<.00
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	<.00	.03	<.00	<.00	<.00	<.00	.01	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4-DP, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Mar											
04...	<.00	<.00	<.00	<.00	<.0	0	<.00	.22	<.00	<.00	<.00
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	<.00	<.00	<.00	<.00	<.0	0	<.00	.16	<.00	<.00	<.00

301503097424701 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
04...	1.0	435	8.1	16.5	9.1	95
04...	10.0	440	8.1	16.0	9.1	94
04...	22.0	447	8.1	16.0	9.0	93

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
04...	1.0	429	8.0	16.5	8.3	86
04...	10.0	429	8.0	16.5	8.3	86
04...	20.0	429	8.0	16.0	8.2	85
04...	25.0	429	8.0	16.5	8.0	83

Table 50.--Chemical-quality survey of Town Lake, March 04, 1981--Continued

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
04...	1.0	426	8.0	16.5	8.7	91
04...	10.0	426	8.0	16.5	9.0	94
04...	20.0	426	8.0	16.5	9.0	94
04...	28.0	426	8.0	16.5	8.9	93

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
04...	1.0	401	8.0	17.0	8.4	88
04...	11.0	407	8.0	17.0	8.2	86

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
04...	1.0	465	8.1	16.5	8.4	88
04...	10.0	452	8.1	16.5	8.4	88
04...	18.0	445	8.1	16.5	8.4	88

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
04...	1.0	322	7.9	17.5	8.3	88
04...	10.0	322	7.9	17.5	8.3	88
04...	14.0	322	7.9	17.5	8.2	87

Table 50.--Chemical-quality survey of Town Lake, March 04, 1981--Continued

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar									
04...	1.0	479	8.2	16.5	.20	5	44	8.7	91
04...	10.0	479	8.1	16.5	--	--	--	8.6	90
04...	18.0	398	8.0	17.0	--	10	92	8.8	93

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 um-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio
Mar										
04...	.9	3,800	K2,400	K5,000	180	43	42	19	28	.9
04...	--	--	--	--	--	--	--	--	--	--
04...	1.7	--	--	--	170	35	42	17	24	.8

Date	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
Mar										
04...	3.2	140	38	49	.20	6.0	270	65	8	.14
04...	--	--	--	--	--	--	--	--	--	.12
04...	2.9	140	32	36	.20	6.4	240	121	14	.15

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar									
04...	.010	.15	<.000	.71	.71	.86	.070	30	3
04...	.010	.13	<.000	.86	.86	.99	.040	40	10
04...	.020	.17	<.000	1.0	1.0	1.2	.080	40	4

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi-disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Mar										
04...	1.0	492	8.3	16.0	1.80	5	2.0	8.7	90	.7
04...	14.0	492	8.2	16.0	--	5	2.0	8.4	87	.7

Table 50.--Chemical-quality survey of Town Lake, March 04, 1981--Continued

301712097470701 SITE Ec--Continued

Date	Coliform, total, (cols./ 100 mL)	Coliform, fecal, 0.7 µm-MF (cols./ 100 mL)	Streptococci, fecal, KF Agar (cols./ 100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)
Mar											
04...	820	290	640	190	47	42	20	30	1	3.4	140
04...	--	--	--	--	--	--	--	--	--	--	--

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Mar											
04...	39	55	.20	5.8	280	1	0	.13	.010	.14	<.000
04...	--	--	--	--	--	19	3	.10	.020	.12	<.000

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)
Mar											
04...	.69	.69	.83	.050	2	70	1	10	10	10	10
04...	.59	.59	.71	.030	--	--	--	--	--	--	--

Date	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
Mar											
04...	1	<.0	0	0	3	<.0	<.00	<.00	<.0	<.00	<.00
04...	--	--	--	--	--	<.0	<.00	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methoxychlor, total (µg/L)
Mar											
04...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
04...	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4-DP, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
Mar											
04...	<.00	<.00	<.00	<.00	<.0	0	<.00	.62	<.00	<.00	<.00
04...	<.00	<.00	<.00	<.00	<.0	0	<.00	.71	<.00	<.00	<.00

best copy available

Table 50.--Chemical-quality survey of Town Lake, March 04, 1981--Continued

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
04...	1.0	276	7.8	18.0	8.5	91
04...	5.0	280	7.8	18.0	8.3	89

Table 51.--Chemical-quality survey of Town Lake, April 27, 1981

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
27...	1.0	509	8.0	18.5	8.9	96
27...	10.0	509	8.0	18.0	8.9	95
27...	23.0	509	8.0	18.0	8.7	93

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr									
27...	1.0	508	8.2	18.0	3.1	5	1.2	9.2	98
27...	10.0	508	8.2	18.0	--	--	--	9.1	97
27...	22.0	508	8.3	18.0	--	5	2.8	9.2	98

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio
Apr										
27...	.9	170	96	19	190	45	45	20	29	.9
27...	--	--	--	--	--	--	--	--	--	--
27...	.4	--	--	--	190	35	45	20	29	.9

Date	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
Apr										
27...	3.6	150	37	50	.30	7.3	280	1	0	--
27...	--	--	--	--	--	--	--	--	--	--
27...	3.5	160	37	46	.30	7.5	280	--	--	.27

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, ortho, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Apr										
27...	--	.32	.040	1.6	1.6	1.9	--	.030	50	7
27...	--	--	--	--	--	--	--	--	--	--
27...	.010	.28	.070	.42	.49	.77	.030	.040	40	10

Table 51.--Chemical-quality survey of Town Lake, April 27, 1981--Continued

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
27...	1.0	509	8.0	18.5	9.1	98
27...	10.0	509	8.0	18.0	9.0	96
27...	16.0	509	8.0	18.0	9.0	96

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
27...	1.0	507	8.2	17.5	9.0	95
27...	13.0	507	8.2	17.5	8.9	94

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
27...	1.0	507	8.2	18.0	9.0	96
27...	10.0	507	8.2	17.5	9.0	95
27...	20.0	507	8.2	17.5	8.9	94
27...	30.0	507	8.2	17.5	8.8	93

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
27...	1.0	509	8.1	17.0	8.6	90
27...	8.0	509	8.1	17.0	8.6	90

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr						
27...	1.0	508	8.2	17.0	8.6	90
27...	13.0	507	8.2	17.0	8.7	91

Table 51.--Chemical-quality survey of Town Lake, April 27, 1981--Continued

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr 27...	1.0	510	8.0	17.5	8.8	93
27...	13.0	510	8.0	17.0	8.9	93

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr 27...	1.0	508	8.0	17.5	2.70	5	1.2	8.7	92
27...	10.0	508	8.1	17.0	--	--	--	8.7	91
27...	21.0	508	8.1	17.0	--	5	1.7	8.6	90

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio
Apr 27...	1.0	62	57	18	190	42	44	20	28	.9
27...	--	--	--	--	--	--	--	--	--	--
27...	.6	--	--	--	190	45	45	20	28	.9

Date	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO$_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
Apr 27...	3.5	150	37	49	.30	7.3	280	0	0	<.00
27...	--	--	--	--	--	--	--	--	--	--
27...	3.4	150	36	47	.30	7.3	280	6	4	--

Date	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, ortho, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Apr 27...	.29	.060	.43	.49	.78	.030	.050	10	6
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	1.1	--	--	.020	10	6

Table 51.--Chemical-quality survey of Town Lake, April 27, 1981--Continued

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr 27...	1.0	496	8.4	17.0	2.30	5	1.5	9.1	95
27...	10.0	496	8.4	17.0	--	--	--	9.1	95
27...	17.0	504	8.4	17.0	--	5	1.5	8.8	92

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)
Apr 27...	1.4	36	K14	K14	190	52	44	20	29
27...	--	--	--	--	--	--	--	--	--
27...	1.0	--	--	--	190	52	44	20	29

Date	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)
Apr 27...	.9	3.6	140	40	47	.30	7.4	280	3
27...	--	--	--	--	--	--	--	--	--
27...	.9	3.7	140	37	50	.30	7.4	280	2

Date	Solids, volatile, suspended (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Apr 27...	2	--	--	--	.45	--	.030	20	4
27...	--	--	--	--	--	--	--	--	--
27...	2	.19	.040	.71	.75	.94	.030	20	3

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Apr 27...	1.0	554	7.2	21.5	11.7	133

Table 52.--Chemical-quality survey of Town Lake, May 26, 1981

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; cols./100 mL, colonies per 100 milliliters; µm-MF, micrometer membrane filter; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
26...	1.0	353	7.7	22.0	7.8	90
26...	10.0	358	7.8	20.5	8.2	91
26...	24.0	381	7.8	20.0	8.2	91

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
26...	1.0	331	7.7	22.5	.20	35	56	7.5	87	1.5
26...	10.0	350	7.7	20.5	--	--	--	8.1	90	--
26...	20.0	372	7.8	20.0	--	--	--	8.2	91	--
26...	25.0	372	7.6	20.5	--	35	72	7.9	88	1.0

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO$_3$)	Hardness, noncarbonate (mg/L CaCO$_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO$_3$)
May											
26...	60,000	14,000	8,300	150	26	43	9.4	12	.4	1.7	120
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	140	34	36	13	19	.7	3.4	110

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
May											
26...	3.4	18	.10	7.0	170	50	30	.59	.020	.61	.120
26...	--	--	--	--	--	--	--	.41	.010	.42	.140
26...	--	--	--	--	--	--	--	--	--	--	--
26...	12	33	.20	6.3	190	53	14	.31	.010	.32	.160

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)
May											
26...	.83	.95	1.6	.060	2	200	<1	0	<10	120	<10
26...	.74	.88	1.3	.060	--	--	--	--	--	20	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	.94	1.1	1.4	.080	2	200	<1	0	<10	40	<10

Table 52.--Chemical-quality survey of Town Lake, May 26, 1981--Continued

301500097424801 SITE Ac--Continued

Date	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	PCB, total (µg/L)	Naphthalenes, polychlor., total (µg/L)	Aldrin, total (µg/L)	Chlordane, total (µg/L)	DDD, total (µg/L)	DDE, total (µg/L)
May											
26...	3	<.0	0	0	4	<.0	<.00	<.00	<.0	<.00	<.00
26...	10	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	4	<.0	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00

Date	DDT, total (µg/L)	Diazinon, total (µg/L)	Dieldrin, total (µg/L)	Endosulfan, total (µg/L)	Endrin, total (µg/L)	Ethion, total (µg/L)	Heptachlor, total (µg/L)	Heptachlor epoxide, total (µg/L)	Lindane, total (µg/L)	Malathion, total (µg/L)	Methoxychlor, total (µg/L)
May											
26...	<.00	.07	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.01	<.00
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	<.00	.07	<.00	<.00	<.00	<.00	<.00	<.00	<.00	.02	<.00

Date	Methyl parathion, total (µg/L)	Methyl trithion, total (µg/L)	Mirex, total (µg/L)	Parathion, total (µg/L)	Perthane, total (µg/L)	Toxaphene, total (µg/L)	Trithion, total (µg/L)	2,4-D, total (µg/L)	2,4-DP, total (µg/L)	2,4,5-T, total (µg/L)	Silvex, total (µg/L)
May											
26...	<.00	<.00	<.00	<.00	<.0	0	<.00	.05	<.00	.01	<.00
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	<.00	<.00	<.00	<.00	<.0	0	<.00	.14	<.00	.01	<.00

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
26...	1.0	362	7.6	21.5	7.1	81
26...	10.0	360	7.6	21.5	7.0	80
26...	16.0	360	7.6	21.5	7.0	80

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
26...	1.0	362	7.5	22.0	7.0	80
26...	10.0	368	7.5	21.5	7.0	80
26...	20.0	368	7.5	21.5	7.0	80
26...	25.0	368	7.5	21.5	6.8	77

Table 52.--Chemical-quality survey of Town Lake, May 26, 1981--Continued

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
26...	1.0	397	7.6	21.0	7.6	85
26...	7.0	397	7.6	21.0	7.5	84

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
26...	1.0	402	7.5	21.5	7.2	82
26...	11.0	402	7.5	21.5	7.1	81

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May						
26...	1.0	406	7.5	21.5	7.2	82
26...	10.0	406	7.5	21.5	6.9	78

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May									
26...	1.0	385	7.7	21.0	.20	30	69	8.2	92
26...	10.0	382	7.7	21.0	--	--	--	8.2	92
26...	20.0	382	7.6	21.0	--	30	66	8.2	92

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio
May										
26...	1.0	29,000	7,800	5,600	160	21	43	13	18	.6
26...	--	--	--	--	--	--	--	--	--	--
26...	1.2	--	--	--	160	29	42	13	18	.6

Table 52.--Chemical-quality survey of Town Lake, May 26, 1981--Continued

301558097452201 SITE Dc--Continued

Date	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
May										
26...	3.4	140	19	32	.20	.4	210	35	12	.39
26...	--	--	--	--	--	--	--	--	--	.38
26...	3.8	130	22	32	.20	6.8	220	52	14	.37

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
May									
26...	.010	.40	.150	.77	.92	1.3	.050	30	4
26...	.010	.39	.150	.81	.96	1.4	.050	120	10
26...	.010	.38	.110	.75	.86	1.2	.050	50	5

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
May										
26...	1.0	375	7.8	20.0	.20	30	66	6.9	77	.8
26...	10.0	374	7.8	20.0	--	--	--	7.0	78	--
26...	18.0	374	7.8	21.0	--	30	62	6.8	76	.8

Date	Coliform, total, (cols./100 mL)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)
May											
26...	3,300	1,600	8,100	150	36	37	13	19	.7	3.2	110
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	150	26	37	13	19	.7	1.5	120

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
May											
26...	31	34	.20	6.3	210	133	13	.34	.010	.35	.140
26...	--	--	--	--	--	--	--	--	--	--	--
26...	18	34	.20	6.4	200	32	14	.34	.010	.35	.150

Table 52.--Chemical-quality survey of Town Lake, May 26, 1981--Continued

301712097470701 SITE Ec--Continued

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (μg/L)	Barium, dissolved (μg/L)	Cadmium, dissolved (ug/L)	Chromium, dissolved (μg/L)	Copper, dissolved (μg/L)	Iron, dissolved (μg/L)	Lead, dissolved (μg/L)
May 26...	.75	.89	1.2	.050	1	200	<1	0	<10	50	<10
26...	--	--	--	--	--	--	--	--	--	--	--
26...	.75	.90	1.3	.050	1	200	<1	0	<10	40	<10

Date	Manganese, dissolved (μg/L)	Mercury, dissolved (μg/L)	Selenium, dissolved (μg/L)	Silver, dissolved (μg/L)	Zinc, dissolved (μg/L)	PCB, total (μg/L)	Naphthalenes, polychlor., total (μg/L)	Aldrin, total (μg/L)	Chlordane, total (μg/L)	DDD, total (μg/L)	DDE, total (μg/L)
May 26...	2	<.0	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00
26...	--	--	--	--	--	--	--	--	--	--	--
26...	1	.4	0	0	<3	<.0	<.00	<.00	<.0	<.00	<.00

Date	DDT, total (μg/L)	Diazinon, total (μg/L)	Dieldrin, total (μg/L)	Endosulfan, total (μg/L)	Endrin, total (μg/L)	Ethion, total (μg/L)	Heptachlor, total (μg/L)	Heptachlor epoxide, total (μg/L)	Lindane, total (μg/L)	Malathion, total (μg/L)	Methoxychlor, total (μg/L)
May 26...	<.00	.07	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00
26...	--	--	--	--	--	--	--	--	--	--	--
26...	<.00	.06	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00	<.00

Date	Methyl parathion, total (μg/L)	Methyl trithion, total (μg/L)	Mirex, total (μg/L)	Parathion, total (μg/L)	Perthane, total (μg/L)	Toxaphene, total (μg/L)	Trithion, total (μg/L)	2,4-D, total (μg/L)	2,4-DP, total (μg/L)	2,4,5-T, total (μg/L)	Silvex, total (μg/L)
May 26...	<.00	<.00	<.00	<.00	<.0	0	<.00	.12	<.00	.01	<.00
26...	--	--	--	--	--	--	--	--	--	--	--
26...	<.00	<.00	<.00	<.00	<.0	0	<.00	.12	<.00	.01	<.00

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
May 26...	1.0	447	7.5	24.5	8.4	101

Table 53.--Chemical-quality survey of Town Lake, February 17, 1982

[μS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity units; μm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; μg/L, micrograms per liter; --- not determined; <, less than; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
17...	1.0	466	8.2	12.5	10.4	100
17...	14.0	466	8.2	11.5	10.2	95

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Feb										
17...	1.0	466	8.2	13.0	2.60	5	1.3	10.3	100	.6
17...	10.0	466	8.2	12.0	--	--	--	10.2	97	--
17...	20.0	466	8.3	11.0	--	--	--	9.9	92	--
17...	25.0	466	8.3	10.5	--	5	1.3	9.7	89	.6

Date	Coliform, fecal, 0.7 μm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)
Feb										
17...	88	K6	190	32	47	18	22	.7	3.3	160
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	190	29	46	18	22	.7	3.3	160

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Feb										
17...	32	38	.20	9.1	270	0	0	<.020	.33	<.060
17...	--	--	--	--	--	--	--	<.020	.34	<.060
17...	--	--	--	--	--	--	--	--	--	--
17...	29	38	.30	9.2	260	0	0	<.020	.31	.080

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (μg/L)	Barium, dissolved (μg/L)	Cadmium, dissolved (μg/L)	Chromium, dissolved (μg/L)	Copper, dissolved (μg/L)	Iron, dissolved (μg/L)
Feb										
17...	--	.66	.99	.010	1	65	<1	<10	4	<10
17...	--	.62	.96	.010	--	--	--	--	--	30
17...	--	--	--	--	--	--	--	--	--	--
17...	.51	.59	.90	.010	1	65	<1	<10	3	<10

Table 53.--Chemical-quality survey of Town Lake, February 17, 1982--Continued

301500097424801 SITE Ac--Continued

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)	Atrazine, total (µg/L)	Cyanazine, total (µg/L)
Feb 17...	1	4	<.1	<1	<1	<3	<.00	<.00	<.00	<.00
17...	--	20	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	4	5	<.1	<1	<1	<3	<.00	<.00	<.00	<.00

Date	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Feb 17...	<.00	<.0	<.0	<.0	<.00	<.0	<.00	<.00	<.00	<.0
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	<.00	<.0	<.0	<.0	<.00	<.0	<.00	<.00	<.00	<.0

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb 17...	1.0	466	8.3	13.0	10.0	97
17...	10.0	466	8.3	12.5	10.0	96
17...	15.0	466	8.3	12.0	10.0	95

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb 17...	1.0	466	8.0	12.5	10.0	96
17...	13.0	466	8.0	12.0	10.0	95

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb 17...	1.0	466	8.0	12.0	9.9	94
17...	10.0	466	8.1	12.0	9.9	94
17...	20.0	466	8.1	11.5	9.9	93
17...	27.0	466	8.1	11.5	9.8	92

Table 53.--Chemical-quality survey of Town Lake, February 17, 1982--Continued

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
17...	1.0	460	8.1	13.0	9.9	96
17...	10.0	460	8.1	12.5	10.0	96

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
17...	1.0	460	8.3	12.0	9.9	94
17...	10.0	460	8.3	12.0	9.9	94
17...	17.0	460	8.2	12.5	9.8	94

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Feb						
17...	1.0	460	8.2	12.0	10.0	95
17...	13.0	460	8.1	12.0	10.1	96

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Feb											
17...	1.0	460	8.5	12.5	2.40	0	2.0	9.8	94	.4	96
17...	10.0	460	8.5	12.0	--	--	--	9.9	94	--	--
17...	17.0	460	8.5	12.0	--	5	2.0	10.0	95	.5	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Feb												
17...	22	190	27	45	18	22	.7	3.6	160	30	40	.30
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	190	37	45	18	22	.7	3.2	150	31	38	.20

Table 53.--Chemical-quality survey of Town Lake, February 17, 1982--Continued

301558097452201 SITE Dc--Continued

Date	Silica, dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, residue at 105 °C, sus-pended (mg/L)	Solids vola-tile, sus-pended (mg/L)	Nitro-gen, nitrite, total (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)	Nitro-gen, ammonia, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Nitro-gen, total (mg/L)	Phos-phorus, total (mg/L)	Iron, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)
Feb												
17...	9.2	260	0	0	<.020	.30	<.060	.61	.91	.010	<10	<1
17...	--	--	--	--	<.020	.27	<.060	.81	1.1	.010	30	10
17...	9.2	260	6	4	<.020	.26	<.060	.66	.92	.010	12	7

301712097470701 SITE Ec

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Trans-par-ency (secchi disk) (m)	Color (plat-inum-cobalt units)	Tur-bid-ity (NTU)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)	Oxygen demand, bio-chem-ical, 5-day (mg/L)
Feb										
17...	1.0	452	8.4	13.0	1.50	0	2.7	10.4	101	.9
17...	10.0	452	8.5	12.5	--	--	--	10.3	99	--
17...	19.0	452	8.3	13.0	--	5	2.3	10.1	98	.8

Date	Coli-form, fecal, 0.7 µm-MF (cols./ 100 mL)	Strep-tococci, fecal, KF Agar (cols./ 100 mL)	Hard-ness (mg/L CaCO3)	Hard-ness, noncar-bonate (mg/L CaCO3)	Calcium, dis-solved (mg/L)	Magne-sium, dis-solved (mg/L)	Sodium, dis-solved (mg/L)	Sodium ad-sorp-tion ratio	Potas-sium, dis-solved (mg/L)	Alka-linity, field (mg/L CaCO3)
Feb										
17...	K6	K15	190	37	45	18	23	.8	3.8	150
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	180	34	44	18	22	.7	3.8	150

Date	Sulfate, dis-solved (mg/L)	Chlo-ride, dis-solved (mg/L)	Fluo-ride, dis-solved (mg/L)	Silica, dis-solved (mg/L)	Solids, sum of constit-uents, dis-solved (mg/L)	Solids, residue at 105 °C, sus-pended (mg/L)	Solids, vola-tile, sus-pended (mg/L)	Nitro-gen, nitrite, total (mg/L)	Nitro-gen, NO2+NO3, total (mg/L)	Nitro-gen, ammonia, total (mg/L)
Feb										
17...	28	38	.30	9.2	260	16	0	<.020	.26	<.060
17...	--	--	--	--	--	--	--	<.020	.26	<.060
17...	30	39	.30	9.0	260	8	5	<.020	.23	.060

Date	Nitro-gen, organic, total (mg/L)	Nitro-gen, am-monia + organic, total (mg/L)	Nitro-gen, total (mg/L)	Phos-phorus, total (mg/L)	Arsenic, dis-solved (µg/L)	Barium, dis-solved (µg/L)	Cadmium, dis-solved (µg/L)	Chro-mium, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)
Feb										
17...	--	.74	1.0	.010	1	65	<1	<10	3	<10
17...	--	.73	.99	.020	--	--	--	--	--	<10
17...	.80	.86	1.1	.010	1	64	<1	<10	4	<10

Table 53.--Chemical-quality survey of Town Lake, February 17, 1982--Continued

301712097470701 SITE Ec--Continued

Date	Lead, dis-solved (µg/L)	Manga-nese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Sele-nium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	Ame-tryne, total	Atra-tone, total (µg/L)	Atra-zine, total (µg/L)	Cyan-azine, total (µg/L)
Feb										
17...	3	2	<.1	<1	<1	<3	<.00	<.00	<.00	<.00
17...	--	10	--	--	--	--	--	--	--	--
17...	<1	2	<.1	<1	<1	<3	<.00	<.00	<.00	<.00

Date	Cypra-zine, total (µg/L)	Metho-myl, total (µg/L)	Prome-tone, total (µg/L)	Prome-tryne, total (µg/L)	Pro-pazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Sima-zine, total (µg/L)	Sime-tone, total (µg/L)	Sime-tryne, total (µg/L)
Feb										
17...	<.00	<.0	<.0	<.0	<.00	<.0	<.00	<.00	<.00	<.0
17...	--	--	--	--	--	--	--	--	--	--
17...	<.00	<.0	<.0	<.0	<.00	<.0	<.00	<.00	<.00	<.0

301601097454001 SITE Fc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Feb						
17...	1.0	562	7.6	19.0	7.2	79

Table 54.--Chemical-quality survey of Town Lake, August 20, 1982

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meter; NTU, nephelometric turbidity unit; µm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
20...	1.0	480	7.7	27.0	5.4	68
20...	10.0	480	7.6	25.0	5.2	63
20...	20.0	480	7.6	24.5	4.9	59
20...	24.0	480	7.6	24.5	4.2	51

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Aug											
20...	1.0	481	7.7	26.5	1.70	5	3.0	5.3	66	.3	160
20...	10.0	480	7.7	25.5	--	--	--	5.3	65	--	--
20...	20.0	480	7.6	25.0	--	--	--	5.0	61	--	--
20...	28.0	478	7.6	25.0	--	15	13	5.0	61	.3	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Aug												
20...	42	190	37	45	18	24	.8	3.3	150	30	43	.20
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	180	34	44	18	23	.8	3.4	150	29	43	.20

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)
Aug												
20...	8.9	260	5	3	<.020	.15	<.060	.50	.65	.030	1	68
20...	--	--	--	--	<.020	.14	<.060	.50	.64	.020	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	8.9	260	23	12	<.020	.15	<.060	.50	.65	.030	1	66

Date	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)
Aug												
20...	<1	<10	1	9	<1	4	<.1	<1	<1	6	<.10	<.10
20...	--	--	--	80	--	20	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	<1	<10	<1	3	<1	18	<.1	<1	<1	<3	<.10	<.10

Table 54.--Chemical-quality survey of Town Lake, August 20, 1977--Continued

301500097424801 SITE Ac--Continued

Date	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Aug												
20...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
20...	1.0	480	7.7	26.0	5.6	69
20...	10.0	480	7.7	25.0	5.3	65
20...	14.0	480	7.6	25.0	5.2	63

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
20...	1.0	482	7.7	25.0	5.3	65
20...	10.0	482	7.7	24.5	5.2	63
20...	14.0	482	7.6	25.0	5.1	62

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
20...	1.0	482	7.7	25.0	5.2	63
20...	10.0	482	7.7	24.5	5.2	63
20...	20.0	482	7.7	24.5	5.2	63
20...	23.0	482	7.7	24.5	5.2	63

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
20...	1.0	480	7.6	24.0	5.0	60
20...	8.0	480	7.6	24.0	5.0	60

Table 54.--Chemical-quality survey of Town Lake, August 20, 1982--Continued

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug 20...	1.0	482	7.6	24.0	5.2	62
20...	10.0	480	7.6	24.0	4.9	58
20...	15.0	480	7.6	24.0	4.9	58

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug 20...	1.0	482	7.6	24.0	5.0	60
20...	11.0	482	7.6	24.0	4.9	58

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Aug 20...	1.0	482	7.6	24.0	1.00	3	7.5	5.0	60	.1	80
20...	10.0	481	7.6	24.0	--	--	--	4.8	57	--	--
20...	20.0	481	7.6	24.0	--	3	11	4.8	57	.1	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Aug 20...	190	190	42	44	20	24	.8	3.3	150	32	43	.20
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	190	38	44	19	23	.8	3.3	150	33	45	.20

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (mg/L)	Manganese, dissolved (µg/L)
Aug 20...	9.1	270	14	8	<.020	.14	<.060	.40	.54	.040	<3	8
20...	--	--	--	--	<.020	.15	<.060	.50	.65	.030	140	40
20...	9.0	270	21	13	<.020	.19	<.060	.40	.59	.040	<3	7

Table 54.--Chemical-quality survey of Town Lake, August 20, 1982--Continued

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Aug											
20...	1.0	478	7.7	23.5	.90	5	2.8	4.9	58	.3	K30
20...	10.0	478	7.7	23.5	--	--	--	4.8	56	--	--
20...	20.0	479	7.7	23.5	--	5	12	4.8	56	--	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Aug												
20...	120	180	34	44	18	24	.8	3.4	150	30	43	.20
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	180	34	44	18	23	.8	3.4	150	29	43	.20

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)
Aug												
20...	8.7	260	17	<2	<.020	.12	<.060	.60	.72	.030	1	66
20...	--	--	--	--	<.020	.12	<.060	.50	.62	.030	--	--
20...	8.7	260	26	8	<.020	.12	<.060	.70	.82	.030	1	65

Date	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)
Aug												
20...	<1	<10	<1	<3	<1	2	<.1	<1	<1	<3	<.10	<.10
20...	--	--	--	10	--	10	--	--	--	--	--	--
20...	<1	<10	<1	<3	<1	2	<.1	<1	<1	<3	<.10	<.10

Date	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Aug												
20...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
20...	1.0	650	7.2	22.5	6.9	80
20...	3.0	650	7.3	22.5	7.0	81

Table 55.--Chemical-quality survey of Town Lake, January 06, 1983

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; µm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
06...	1.0	548	7.9	12.5	9.3	88
06...	10.0	548	7.9	12.5	9.3	88
06...	20.0	534	7.8	11.5	8.2	75
06...	25.0	534	7.8	11.5	7.9	72

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Jan										
06...	1.0	543	7.8	13.0	2.00	<1	1.8	8.7	83	.6
06...	10.0	543	7.8	13.0	--	--	--	9.0	86	--
06...	20.0	539	7.7	11.0	--	--	--	8.5	77	--
06...	26.0	539	7.7	11.0	--	<1	2.1	8.3	75	.5

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)
Jan											
06...	K14	20	220	38	54	20	27	.8	2.9	180	33
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	210	43	54	19	27	.8	2.8	170	32

Date	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Jan										
06...	45	.30	9.4	300	3	<1	--	<.020	.50	.090
06...	--	--	--	--	--	--	.38	.020	.40	.080
06...	--	--	--	--	--	--	--	--	--	--
06...	43	.30	9.1	290	2	<1	--	<.020	.50	.090

Table 55.--Chemical-quality survey of Town Lake, January 06, 1983--Continued

301500097424801 SITE Ac--Continued

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Jan										
06...	.61	.70	1.2	.020	1	69	<1	<10	7	30
06...	.52	.60	1.0	.020	--	--	--	--	--	20
06...	--	--	--	--	--	--	--	--	--	--
06...	.51	.60	1.1	.020	1	65	<1	<10	4	5

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)	Atrazine, total (µg/L)	Cyanazine, total (µg/L)
Jan										
06...	<1	5	<.1	<1	1	17	<.10	<.10	<.10	<.10
06...	--	<10	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	<1	9	<.1	<1	<1	6	<.10	<.10	<.10	<.10

Date	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Jan										
06...	<.10	<2.0	.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	<.10	<2.0	.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

301503097424701 SITE Al

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
06...	1.0	538	7.8	13.5	8.9	86
06...	12.0	542	7.8	12.5	8.1	76

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
06...	1.0	549	7.9	13.0	9.3	89
06...	10.0	558	7.9	12.0	9.3	86
06...	14.0	544	7.8	11.0	8.4	76

Table 55.--Chemical-quality survey of Town Lake, January 06, 1983--Continued

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
06...	1.0	550	7.9	13.0	9.2	88
06...	10.0	550	7.9	12.5	9.2	87
06...	20.0	550	7.8	11.5	9.1	83
06...	27.0	541	7.8	11.0	8.2	75

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
06...	1.0	558	7.8	12.0	9.6	89
06...	9.0	565	7.8	12.0	9.5	88

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
06...	1.0	558	7.8	12.0	9.6	89
06...	14.0	558	7.6	11.0	8.2	75

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan						
06...	1.0	575	7.8	12.5	10.4	98
06...	10.0	565	7.8	11.5	9.9	91
06...	15.0	565	7.7	11.5	9.2	84

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Jan									
06...	1.0	583	7.7	12.5	2.70	<1	1.2	10.1	95
06...	10.0	565	7.8	11.5	--	--	--	9.8	90
06...	20.0	565	7.7	11.0	--	<1	1.0	9.0	82

Table 55.--Chemical-quality survey of Town Lake, January 06, 1983--Continued

301558097452201 SITE Dc--Continued

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L, $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio
Jan									
06...	.7	110	37	240	39	61	21	26	.8
06...	--	--	--	--	--	--	--	--	--
06...	.5	--	--	230	39	57	21	27	.8

Date	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Jan									
06...	2.5	200	34	43	.30	9.0	320	2	<1
06...	--	--	--	--	--	--	--	--	--
06...	2.7	190	34	45	.30	9.6	310	<1	<1

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Jan									
06...	<.020	.70	<.060	--	.50	1.2	.020	3	8
06...	<.020	.50	.060	.64	.70	1.2	<.010	20	10
06...	<.020	.60	.070	.73	.80	1.4	.020	<3	14

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)
Jan											
06...	1.0	556	7.6	13.5	<1	.80	9.6	92	.2	K12	K13
06...	10.0	543	7.8	13.5	--	--	9.7	93	--	--	--
06...	14.0	538	7.9	12.0	<1	1.0	10.3	95	.5	--	--

Date	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field, (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)
Jan												
06...	220	39	53	21	27	.8	2.9	180	35	47	.30	9.0
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	210	52	50	21	30	.9	3.2	160	36	51	.30	8.9

Table 55.--Chemical-quality survey of Town Lake, January 06, 1983--Continued

301712097470701 SITE Ec--Continued

Date	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (mg/L)	Barium, dissolved (mg/L)
Jan												
06...	300	4	<1	<.020	.40	<.060	--	.60	1.0	<.010	1	70
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	300	<1	<1	<.020	.20	.060	.54	.60	.80	.010	1	73

Date	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)
Jan												
06...	<1	<10	2	8	<1	3	<.1	<1	<1	7	<.10	<.10
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	<1	<10	1	4	<1	3	<.1	<1	1	4	<.10	<.10

Date	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Jan												
06...	<.10	<.10	<.10	<2.0	.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	<.10	<.10	<.10	<2.0	.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

Table 56.--Chemical-quality survey of Town Lake, August 30, 1983

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; µm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
30...	1.0	575	7.5	27.5	5.7	73
30...	10.0	575	7.4	26.5	4.6	58
30...	20.0	575	7.4	26.0	4.9	61
30...	27.0	575	7.4	25.5	4.5	56

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)
Aug										
30...	1.0	575	7.5	27.5	2.10	<1	2.0	6.0	77	.6
30...	10.0	575	7.5	27.0	--	--	--	6.3	80	--
30...	20.0	575	7.4	26.0	--	--	--	5.4	67	--
30...	27.0	579	7.4	26.0	--	<1	4.0	4.9	61	.6

Date	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)
Aug										
30...	210	30	210	53	49	22	34	1	4.1	160
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	210	53	49	22	35	1	3.6	160

Date	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)
Aug										
30...	43	62	.20	8.6	320	7	<1	<.020	.10	.080
30...	--	--	--	--	--	--	--	<.020	<.10	.060
30...	--	--	--	--	--	--	--	--	--	--
30...	44	63	.20	8.7	320	8	<1	<.020	.10	.100

Table 56.--Chemical-quality survey of Town Lake, August 30, 1983--Continued

301500097424801 SITE Ac--Continued

Date	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Aug										
30...	.22	.30	.40	.010	1	78	<1	<10	5	<3
30...	.44	.50	--	.010	--	--	--	--	--	10
30...	--	--	--	--	--	--	--	--	--	--
30...	.30	.40	.50	.010	1	79	<1	<10	3	45

Date	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)	Ametryne, total	Atratone, total (µg/L)	Atrazine, total (µg/L)	Cyanazine, total (µg/L)
Aug										
30...	2	2	<.1	<1	<1	9	<.10	<.10	<.10	<.10
30...	--	10	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	2	24	<.1	<1	<1	20	<.10	<.10	<.10	<.10

Date	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Aug										
30...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

301503097424701 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
30...	1.0	575	7.3	28.0	5.4	70
30...	10.0	578	7.3	27.5	5.4	69
30...	18.0	578	7.4	26.0	5.2	65

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
30...	1.0	578	7.6	27.0	6.5	83
30...	10.0	580	7.6	26.0	6.2	77
30...	20.0	580	7.6	25.5	5.8	72
30...	25.0	580	7.6	25.5	5.6	69

Table 56.--Chemical-quality survey of Town Lake, August 30, 1983--Continued

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
30...	1.0	575	7.7	27.0	6.7	85
30...	10.0	579	7.6	26.0	6.2	77
30...	21.0	579	7.6	25.5	5.4	67

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
30...	1.0	591	7.5	24.5	6.1	74
30...	10.0	591	7.5	24.0	5.9	71

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
30...	1.0	589	7.6	24.5	5.9	72
30...	10.0	589	7.6	24.5	5.7	69
30...	18.0	589	7.6	24.5	5.4	66

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug									
30...	1.0	582	7.7	24.5	1.70	<1	3.2	5.9	72
30...	10.0	582	7.7	24.0	--	--	--	5.9	71
30...	18.0	582	7.7	24.0	--	<1	3.0	5.7	69

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio
Aug									
30...	.4	240	70	200	54	47	21	36	1
30...	--	--	--	--	--	--	--	--	--
30...	.5	--	--	210	63	49	22	36	1

Table 56.--Chemical-quality survey of Town Lake, August 30, 1983--Continued

301558097452201 SITE Dc--Continued

Date	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Aug									
30...	3.7	150	42	64	.20	8.1	310	10	<1
30...	--	--	--	--	--	--	--	--	--
30...	3.7	150	44	65	.20	8.4	320	12	<1

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Aug									
30...	<.020	<.10	.080	.22	.30	--	.010	7	8
30...	<.020	<.10	.090	.31	.40	--	.010	20	20
30...	<.020	.10	.070	.13	.20	.30	.010	46	9

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Aug											
30...	1.0	582	7.9	22.5	1.40	<1	3.5	6.3	74	.4	K14
30...	10.0	582	7.9	22.5	--	--	--	6.3	74	--	--
30...	18.0	582	7.9	23.0	--	<1	3.0	5.9	70	.3	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Aug												
30...	240	210	58	47	22	36	1	3.7	150	36	66	.20
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	210	58	47	22	36	1	4.4	150	44	66	.20

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)
Aug												
30...	7.9	310	15	8	<.020	<.10	.050	.35	.40	.010	<1	80
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	7.8	320	14	<1	<.020	<.10	.030	.37	.40	.010	1	82

Table 56.--Chemical-quality survey of Town Lake, August 30, 1983--Continued

301712097470701 SITE Ec--Continued

Date	Cadmium, dis-solved (µg/L)	Chromium, dis-solved (µg/L)	Copper, dis-solved (µg/L)	Iron, dis-solved (µg/L)	Lead, dis-solved (µg/L)	Manganese, dis-solved (µg/L)	Mercury, dis-solved (µg/L)	Selenium, dis-solved (µg/L)	Silver, dis-solved (µg/L)	Zinc, dis-solved (µg/L)	Ametryne, total	Atratone, total (µg/L)
Aug												
30...	<1	<10	2	14	2	3	<.1	<1	<1	6	<.10	<.10
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	<1	10	2	12	3	7	<.1	<1	<1	13	<.10	<.10

Date	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Cyprazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetone, total (µg/L)	Simetryne, total (µg/L)
Aug												
30...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.10	<.1

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (percent saturation)
Aug						
30...	1.0	630	7.2	23.5	8.2	98
30...	8.0	633	7.2	23.0	6.4	76

Table 57.--Chemical-quality survey of Town Lake, March 07, 1984

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; µm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
07...	1.0	610	8.2	16.5	9.0	92
07...	10.0	610	8.2	16.5	9.1	93
07...	20.0	610	8.1	16.5	9.1	93
07...	30.0	610	7.9	15.0	6.2	62

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Mar											
07...	1.0	610	8.1	17.0	1.80	<1	1.4	9.0	93	1.0	45
07...	10.0	610	8.1	17.0	--	--	--	9.2	95	--	--
07...	20.0	610	8.1	16.0	--	--	--	8.5	86	--	--
07...	30.0	610	7.9	15.5	--	<1	35	7.8	78	.4	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Mar												
07...	23	250	41	64	22	29	.8	2.7	210	41	50	.30
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	250	36	62	22	29	.8	2.7	210	39	49	.30

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)
Mar												
07...	6.8	340	6	<2	.39	.010	.40	.020	.18	.20	.60	.010
07...	--	--	--	--	.39	.010	.40	.100	.20	.30	.70	.020
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	6.9	340	86	27	.38	.020	.40	.100	.20	.30	.70	.050

Date	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)
Mar												
07...	1	69	<1	30	4	7	<1	2	<.1	<1	<1	6
07...	--	--	--	--	--	50	--	<10	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	1	69	<1	30	2	6	<1	7	<.1	<1	<1	8

Table 57.--Chemical-quality survey of Town Lake, March 07, 1984--Continued

301500097424801 SITE Ac-Continued

Date	Ame-tryne, total	Atra-zine, total (µg/L)	Cyan-azine, total (µg/L)	Metho-myl, total (µg/L)	Prome-tone, total (µg/L)	Prome-tryne, total (µg/L)	Pro-pazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Sima-zine, total (µg/L)	Sime-tryne, total (µg/L)
Mar											
07...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1

301503097424701 SITE Al

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Mar						
07...	1.0	610	8.1	17.0	9.0	93
07...	10.0	610	8.1	17.0	9.1	94
07...	20.0	610	8.1	16.5	8.4	86

301500097440801 SITE Br

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Mar						
07...	1.0	605	8.1	16.0	9.0	91
07...	10.0	605	8.1	16.0	8.8	89
07...	14.0	602	8.0	15.5	7.8	78

301504097440901 SITE Bc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Mar						
07...	1.0	606	8.1	16.5	9.1	93
07...	10.0	604	8.1	16.0	8.9	90
07...	20.0	602	8.1	16.0	8.8	89
07...	30.0	616	7.7	15.0	4.1	41

301544097445201 SITE Cr

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Mar						
07...	1.0	605	7.8	15.5	8.2	82
07...	10.0	605	7.8	15.5	8.1	81

Table 57.--Chemical-quality survey of Town Lake, March 07, 1984--Continued

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
07...	1.0	610	7.8	16.0	8.7	88
07...	10.0	610	7.8	16.0	8.8	89
07...	14.0	610	7.8	16.0	8.7	88

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar						
07...	1.0	622	7.7	16.0	9.3	95
07...	10.0	622	7.7	15.5	9.2	93

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar									
07...	1.0	625	7.6	16.5	2.10	<1	1.1	8.9	91
07...	10.0	622	7.8	15.5	--	--	--	9.8	99
07...	20.0	613	7.8	15.5	--	<1	.90	8.8	88

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 um-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Mar										
07...	1.0	260	74	280	52	75	23	24	.6	2.1
07...	--	--	--	--	--	--	--	--	--	--
07...	1.0	--	--	270	47	69	23	25	.7	2.2

Date	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
Mar									
07...	230	35	42	.30	7.3	350	<2	<2	.78
07...	--	--	--	--	--	--	--	--	.69
07...	220	36	44	.30	7.8	340	5	<2	.49

Table 57.--Chemical-quality survey of Town Lake, March 07, 1984--Continued

301556097452301 SITE Dr--Continued

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen organic, total (mg/L)	Nitrogen, ammonia +, organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Mar									
07...	.020	.80	.050	--	<.20	--	.010	17	6
07...	.010	.70	<.010	--	.20	.90	.010	80	10
07...	.010	.50	.040	.26	.30	.80	.010	5	13

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0,7 µm-MF (cols./100 mL)
Mar											
07...	1.0	584	7.6	15.5	4.0	<1	.90	9.6	97	.1	K6
07...	13.0	575	7.8	15.0	--	<1	1.1	10.1	100	.2	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Mar												
07...	62	240	47	57	23	26	.8	2.8	190	37	47	.20
07...	--	230	42	55	23	28	.8	3.1	190	39	51	.30

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Mar												
07...	7.6	310	<2	<2	<.010	.40	.050	.15	.20	.60	.010	<1
07...	7.0	320	3	<2	<.010	.30	.040	.16	.20	.50	.010	<1

Date	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)
Mar											
07...	73	<1	40	<1	4	<1	6	<.1	<1	<1	9
07...	73	<1	30	<1	10	<1	6	<.1	<1	<1	8

Date	Ametryne, total	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetryne, total (µg/L)
Mar											
07...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1
07...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1

Table 57.--Chemical-quality survey of Town Lake, March 07, 1984--Continued

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Mar 07...	1.0	644	7.6	19.0	15.0	162

Table 58.--Chemical-quality survey of Town Lake, August 20, 1984

[µS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; µm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; µg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
20...	1.0	540	8.1	28.5	7.2	94
20...	10.0	540	8.1	28.0	7.9	103
20...	20.0	540	7.8	27.5	5.9	76
20...	25.0	540	7.7	27.0	4.2	54

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)
Aug											
20...	1.0	539	8.0	29.0	2.70	3	1.3	6.9	91	1.4	K62
20...	10.0	540	7.9	28.0	--	--	--	6.5	85	--	--
20...	20.0	540	7.8	27.5	--	--	--	6.0	77	--	--
20...	25.0	540	7.7	27.5	--	4	11	5.0	64	1.2	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness, noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Aug												
20...	K5	200	51	44	22	32	1	3.6	150	41	58	.30
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	200	51	44	22	32	1	3.8	150	38	58	.30

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, (mg/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (mg/L)
Aug											
20...	5.7	300	4	1	<.010	<.10	.020	.18	.20	<.010	1
20...	--	--	--	--	<.010	<.10	<.010	--	.20	<.010	--
20...	--	--	--	--	--	--	--	--	--	--	--
20...	6.1	290	16	1	<.010	<.10	.060	.14	.20	<.010	1

Date	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissovled (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)
Aug											
20...	74	<1	<10	3	<3	9	<1	<.1	<1	<1	8
20...	--	--	--	--	20	--	<10	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
20...	75	<1	<10	1	5	1	10	<.1	<1	<1	7

Table 58.--Chemical-quality survey of Town Lake, August 20, 1984--Continued

301500097424801 SITE Ac--Continued

Date	Ame-tryne, total	Atra-zine, total (µg/L)	Cyan-zine, total (µg/L)	Metho-myl, total (µg/L)	Prome-tone, total (µg/L)	Prome-tryne, total (µg/L)	Prome pazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Sima-zine, total (µg/L)	Sime-tryne, total (µg/L)
Aug											
20...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1
20...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
20...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1

301503097424701 SITE Al

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Aug						
20...	1.0	540	7.9	28.5	6.9	91
20...	10.0	540	7.9	28.0	6.5	85
20...	18.0	540	7.9	28.0	6.2	81

301500097440801 SITE Br

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Aug						
20...	1.0	544	7.9	28.0	6.5	85
20...	13.0	544	7.9	27.5	6.2	80

301504097440901 SITE Bc

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Aug						
20...	1.0	544	8.0	28.0	6.6	86
20...	10.0	544	8.0	28.0	6.6	86
20...	20.0	544	7.9	27.5	6.2	80
20...	27.0	544	7.9	27.5	6.0	77

301544097445201 SITE Cr

Date	Sam-pling depth (feet)	Spe-cific con-duct-ance (µS/cm)	pH (stand-ard units)	Temper-ature (°C)	Oxygen, dis-solved (mg/L)	Oxygen, dis-solved (per-cent satu-ration)
Aug						
20...	1.0	550	7.8	27.5	5.9	76
20...	8.0	550	7.8	27.5	5.7	73

Table 58.--Chemical-quality survey of Town Lake, August 20, 1984--Continued

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
20...	1.0	546	7.9	29.0	6.5	86
20...	10.0	546	7.8	27.5	5.9	76
20...	17.0	546	7.8	27.5	5.7	73

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug						
20...	1.0	540	7.9	27.5	5.8	75
20...	10.0	540	7.9	27.5	5.8	75
20...	15.0	540	7.9	27.5	5.8	75

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 um-MF (cols./100 mL)
Aug											
20...	1.0	540	7.9	27.5	2.60	5	1.6	6.0	77	1.5	80
20...	10.0	540	7.9	27.5	--	--	--	5.9	76	--	--
20...	21.0	548	7.8	27.5	--	4	1.6	5.8	75	1.4	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Aug												
20...	K19	200	48	43	22	33	1	3.8	150	37	57	.30
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	200	55	44	23	34	1	3.7	150	41	59	.30

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Aug												
20...	5.8	290	6	3	<.010	<.10	<.010	--	.20	<.010	4	5
20...	--	--	--	--	<.010	<.10	.020	.38	.40	<.010	10	<10
20...	5.9	300	5	4	<.010	<.10	.020	.18	.20	.010	7	7

Table 58.--Chemical-quality survey of Town Lake, August 20, 1984--Continued

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 um-MF (cols./100 mL)
Aug 20...	1.0	539	7.9	27.0	2.30	4	2.0	5.8	74	1.5	39
20...	10.0	539	7.8	27.0	--	--	--	5.9	75	--	--
20...	16.0	539	7.8	27.0	--	20	1.8	5.8	74	1.5	--

Date	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L CaCO3)	Hardness noncarbonate (mg/L CaCO3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L CaCO3)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Aug 20...	80	200	46	42	22	32	1	3.8	150	38	59	.30
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	200	51	44	22	32	1	3.6	150	37	57	.30

Date	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (µm/L)	Phosphorus, total (mg/L)	Arsenic, dissolved (µg/L)
Aug 20...	5.5	290	5	2	<.010	<.10	.010	.19	.20	<.010	1
20...	--	--	--	--	<.010	<.10	.020	.18	.20	<.010	--
20...	5.6	290	3	1	<.010	<.10	.030	.67	.70	<.010	1

Date	Barium, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Manganese, dissolved (µg/L)	Mercury, dissolved (µg/L)	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Zinc, dissolved (µg/L)
Aug 20...	74	<1	<10	<1	3	5	2	<.1	<1	<1	5
20...	--	--	--	--	<10	--	<10	--	--	--	--
20...	74	<1	<10	<1	<3	2	1	<.1	<1	<1	6

Date	Ametryne, total	Atrazine, total (µg/L)	Cyanazine, total (µg/L)	Methomyl, total (µg/L)	Prometone, total (µg/L)	Prometryne, total (µg/L)	Propazine, total (µg/L)	Propham, total (µg/L)	Sevin, total (µg/L)	Simazine, total (µg/L)	Simetryne, total (µg/L)
Aug 20...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1
20...	--	--	--	--	--	--	--	--	--	--	--
20...	<.10	<.10	<.10	<2.0	<.1	<.1	<.10	<2.0	<2.0	<.10	<.1

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Aug 20...	1.0	739	7.3	25.5	6.5	81

Table 59.--Chemical-quality survey of Town Lake, October 11, 1984

[μS/cm, microsiemens per centimeter at 25 °C; °C, degrees Celsius; mg/L, milligrams per liter; m, meters; NTU, nephelometric turbidity unit; μm-MF, micrometer membrane filter; cols./100 mL, colonies per 100 milliliters; NO2+NO3, nitrite plus nitrate; μg/L, micrograms per liter; ---, not determined; <, less than; K, non-ideal colony count]

301559097424801 SITE Ar

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
11...	1.0	525	7.7	25.0	5.4	66
11...	10.0	487	7.6	24.0	5.4	65
11...	20.0	453	7.6	23.0	5.4	63
11...	28.0	401	7.7	23.0	5.8	68

301500097424801 SITE Ac

Date	Sampling depth (feet)	Specific conductance (μS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct									
11...	1.0	475	7.6	25.0	.20	70	46	5.4	66
11...	10.0	425	7.6	23.0	--	--	--	5.9	69
11...	20.0	345	7.6	22.0	--	--	--	6.1	70
11...	30.0	349	7.3	22.0	--	250	160	6.2	71

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 μm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio
Oct									
11...	1.0	K6,500	K13,000	160	45	38	17	29	1
11...	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--
11...	1.5	--	--	120	21	32	10	19	.8

Date	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Oct									
11...	3.7	120	36	53	.30	5.3	250	36	8
11...	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--
11...	3.6	100	27	33	.20	4.6	190	104	21

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (μg/L)	Manganese, dissolved (μg/L)
Oct									
11...	<.010	.20	.040	.46	.50	.70	.070	25	<1
11...	--	--	--	--	--	--	--	--	--
11...	<.010	.60	.060	.64	.70	1.3	.170	50	10
11...	<.010	.60	.070	.63	.70	1.3	.180	39	4

Table 59.--Chemical-quality survey of Town Lake, October 11, 1984--Continued

301503097424701 SITE A1

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
11...	1.0	510	7.6	25.0	5.3	65
11...	10.0	418	7.7	23.0	5.9	69
11...	22.0	341	7.7	22.0	6.1	70

301500097440801 SITE Br

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
11...	1.0	491	7.7	24.0	5.5	66
11...	10.0	311	7.8	21.5	6.2	71
11...	14.0	296	7.8	21.5	6.2	71

301504097440901 SITE Bc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
11...	1.0	500	7.7	24.5	5.5	66
11...	10.0	428	7.7	23.0	5.8	68
11...	15.0	394	7.8	22.5	5.9	69
11...	20.0	292	7.8	22.0	6.0	69
11...	28.0	296	7.8	21.0	6.2	70

301544097445201 SITE Cr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
11...	1.0	288	7.8	21.0	6.3	71
11...	6.0	288	7.8	21.0	6.2	70

Table 59.--Chemical-quality survey of Town Lake, October 11, 1984--Continued

301546097445101 SITE Cc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
11...	1.0	291	7.8	21.0	6.5	73
11...	10.0	298	7.9	21.0	6.4	72
11...	16.0	282	7.8	21.0	6.3	71

301556097452301 SITE Dr

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct						
11...	1.0	466	7.9	23.0	6.0	70
11...	10.0	255	7.8	20.5	6.4	71

301558097452201 SITE Dc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct									
11...	1.0	465	7.8	22.5	.20	100	63	6.1	71
11...	10.0	252	7.8	20.5	--	--	--	6.4	71
11...	19.0	269	7.7	20.5	--	500	410	6.2	69

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)
Oct										
11...	1.2	K7,000	7,100	160	55	38	17	28	1	3.9
11...	--	--	--	--	--	--	--	--	--	--
11...	3.4	--	--	130	27	39	7.2	9.4	4	3.5

Date	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)	Nitrogen, nitrate, total (mg/L)
Oct									
11...	110	37	55	.20	5.4	250	49	12	--
11...	--	--	--	--	--	--	--	--	1.3
11...	100	24	15	.10	7.2	170	--	43	1.4

Table 59.--Chemical-quality survey of Town Lake, October 11, 1984--Continued

301558097452201 SITE Dc--Continued

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct									
11...	<.010	.40	.020	.38	.40	.80	.060	23	<1
11...	.020	1.3	.030	1.3	1.3	2.6	.210	730	70
11...	.020	1.4	.050	1.8	1.8	3.2	.190	300	34

301712097470701 SITE Ec

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Transparency (secchi disk) (m)	Color (platinum-cobalt units)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct									
11...	1.0	578	7.8	23.5	1.50	5	1.6	5.6	66
11...	10.0	553	7.3	22.5	--	--	--	5.4	63
11...	13.0	565	6.8	21.0	--	45	20	5.4	61

Date	Oxygen demand, biochemical, 5-day (mg/L)	Coliform, fecal, 0.7 µm-MF (cols./100 mL)	Streptococci, fecal, KF Agar (cols./100 mL)	Hardness (mg/L $CaCO_3$)	Hardness, noncarbonate (mg/L $CaCO_3$)	Calcium, dis solved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Sodium adsorption ratio
Oct									
11...	.5	K620	3,000	200	62	43	23	38	1
11...	--	--	--	--	--	--	--	--	--
11...	.6	--	--	250	19	70	18	14	.4

Date	Potassium, dissolved (mg/L)	Alkalinity, field (mg/L $CaCO_3$)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Solids, residue at 105 °C, suspended (mg/L)	Solids, volatile, suspended (mg/L)
Oct									
11...	4.1	140	45	70	.30	5.7	310	2	1
11...	--	--	--	--	--	--	--	--	--
11...	2.0	230	<15	26	.20	9.0	--	24	4

Date	Nitrogen, nitrite, total (mg/L)	Nitrogen, NO2+NO3, total (mg/L)	Nitrogen, ammonia, total (mg/L)	Nitrogen, organic, total (mg/L)	Nitrogen, ammonia + organic, total (mg/L)	Nitrogen, total (mg/L)	Phosphorus, total (mg/L)	Iron, dissolved (µg/L)	Manganese, dissolved (µg/L)
Oct									
11...	<.010	<.10	.030	.17	.20	--	.010	<3	<1
11...	<.010	.60	.030	.37	.40	1.0	.030	20	10
11...	<.010	2.0	.010	.79	.80	2.8	.050	8	<1

Table 59.--Chemical-quality survey of Town Lake, October 11, 1984--Continued

301601097454001 SITE Fc

Date	Sampling depth (feet)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Oxygen, dissolved (mg/L)	Oxygen, dissolved (percent saturation)
Oct 11...	1.0	294	7.5	21.0	6.1	69